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ABSTRACT

One component of the "Master Curriculum Guide in Economics for the Nation's Schools," this guide demonstrates, through sample lessons, how the conceptual structure of economics, presented in part 1 of the series, can be taught in the K-12 curricula. The guide is designed to accelerate economics instruction at all grade levels, including the college-level social studies methods course. Lessons are organized by four major categories: concept learning, inquiry, skills learning, and value analysis. Information presented for each lesson includes grade level, teaching method, economic concepts, objectives, materials needed, and teaching procedures. Also provided in the guide is a classification of lessons by economic concepts and discussions of concept learning and deductive and inductive teaching approaches. Student handouts are included. (RM)

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Part II. Strategies for Teaching Economics

Master Curriculum Guide in Economics for the Nation's Schools

Using Economics in Social Studies Methods Courses

Dennis J. Weidenaar
Chair

SO 014 581

1982

Joint Council on Economic Education

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Dennis J. Weidenaar is a professor of economics at the School of Management and Krannert Graduate School of Management of Purdue University.

The Joint Council on Economic Education is extremely grateful to the members of its Publications Committee who reviewed the manuscript of this volume. However, responsibility for the published version rests with the author and publisher.

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Director of Publications: Lawrence A. Mayer
Associate Director of Publications: Ester Moskowitz

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Foreword

Strategies for Teaching Economics is one component of a two-part publication entitled *Master Curriculum Guide in Economics for the Nation's Schools.* Part I of the guide, *A Framework for Teaching Economics: Basic Concepts,* presents a conceptual structure of economics and provides examples of how that structure can be used to reach a more thorough understanding of economic questions and to assist in personal decision-making. Part II, *Strategies for Teaching Economics,* demonstrates to educators how the conceptual framework can be taught at various grade levels: primary, intermediate, and secondary. It is published as several volumes in order to meet the different needs of the entire K–12 curriculum that confront both teachers and curriculum development specialists.

The Joint Council greatly appreciates the excellent cooperation given to us by the many universities and school systems associated with the development of these curriculum strategies. We are especially indebted to the individuals who drafted the materials. While we make no claim that the lessons included have been evaluated under all classroom conditions, we believe that the lessons will work at the designated grade levels. We consider the existing volumes as working documents and expect to publish revised editions.

The Master Curriculum Project has been made possible by generous contributions from many dedicated sponsors. We appreciate the confidence they have expressed in the economic education movement. The present volume was made possible through the generosity of the Sears-Roebuck Foundation. We acknowledge with gratitude the Foundation's long-standing support of Joint Council activities, including a film about the JCEE, an extensive textbook evaluation project, a seminar for textbook publishers, and the Summer Fellowship Program in Economic Education for training elementary school teachers.

We firmly believe that *Strategies for Teaching Economics* can serve teachers well as practical guidelines for building economics lessons into existing curricula. Properly used, the Master Curriculum Guide is a powerful device for accelerating economics instruction at all grade levels including the college-level social studies methods course.

MICHAEL A. MACDOWELL
President, JCEE

Preface

The Master Curriculum Guide (MCG) is designed to assist in curriculum development. School systems, individual teachers, and teacher-educators can use it as a resource document to present economic education in the K–12 curriculum; teacher-educators can use it in workshops and other training sessions. Part I provides a framework for teaching economic ideas while Part II presents detailed classroom lessons illustrating how these ideas can be taught at different levels of difficulty. Thus, the MCG indicates what economic ideas should be taught, in which classes they can be taught, and how they can be taught.

The MCG is an outgrowth of the Developmental Economic Education Project (DEEP). Working documents produced for the DEEP experiment in curriculum change conducted between 1964 and 1969 included the "two little red books," as they were called in the field; one was a statement of economic concepts to be taught as outlined in the *Task Force Report on Economic Education in the Schools* (1961), and the other offered some suggestions for grade placement of the concepts. These materials were later combined into a single volume entitled *Economics in the Curriculum*. During the 1960s and early 1970s these three publications were extensively used, especially by schools associated with the DEEP Cooperating Schools Program. Literally hundreds of curriculum guides and lesson plans were developed on the basis of the DEEP publications, and through them thousands of teachers and students were introduced to economic education.

During the 1973 meetings of the National Association of Economic Educators (formerly the National Association of Affiliated Economic Education Directors), many Council and Center directors urged the Joint Council to undertake what later became known as the Master Curriculum Guide Project. It took three years for a committee headed by W. Lee Hansen to develop *A Framework for Teaching Economics*. At the same time, several curriculum groups were established. They were headed by the individuals whose names appear on the title pages of the published volumes of teaching strategies. Each curriculum group was responsible for a first selection of those economic concepts that could be most usefully taught in a specific grade and subject. June V. Gilliard, director of curriculum for the Joint Council, contributed importantly to the design of the teaching strategies in each volume.

The present strategies volume, unlike others in Part II of the MCG series, is directed at educators of teachers. It is a pioneering attempt, developed under the leadership of Professor Dennis J. Weidenaar of Purdue University, to use economics as a means of instructing social studies teachers in educational methodology. We are indebted to him and his associates for the imagination and effort necessary to produce this volume.

Ester Moskowitz, of the Joint Council staff, performed the considerable task of editing this large work. Two other members of the staff, Dr. Gilliard and Lawrence A. Mayer, were active advisers.

The Joint Council is interested in obtaining your views concerning its instructional materials, etc.

S. STOWELL SYMMES
Director, School Services Division
Coordinator, Master Curriculum Guide Project

Introduction

"Don't tell me *how* to teach; show me!" Both prospective and experienced teachers have made that request many times, and this publication is our response to their plea. We designed this sixth volume in the Master Curriculum Guide series of the Joint Council on Economic Education to help methods and economic educators teach pedagogical techniques with the use of economics concepts. It is the culmination of five years of interchange between college and university social studies educators and economic educators. During that time, two activities provided the foundation for this publication. The first was a survey taken in 1974 among college and university social studies methods educators to determine the nature and extent of their formal training in economics and their attitudes toward and involvement in the field.* The second consisted of a series of biennial institutes in economic education for social studies methods faculty. These programs, conducted in 1976, 1978, and 1980, provided an opportunity for the exchange of ideas and experiences between social studies methods educators and economic educators. The Sears-Roebuck Foundation funded both projects.

This publication consists of classroom activities that demonstrate how economics can be used as the vehicle for teaching the major topics most frequently included in the typical social studies methods course: concept learning, inquiry, skills learning, and valuing. To facilitate use of the activities and encourage their integration into the methods course, the guide is divided into four sections, one for each topic. Each section begins with a brief overview of the methods topic. The presentation of the activities follows a standard format that includes an introduction, a statement of the economics concept(s) involved, and a step-by-step description of the activity, as well as copies of all handouts. We also indicate the appropriate grade levels for each activity, but these designations should be interpreted broadly. A cross reference of the activities by methods, topic, grade level, and economics concepts follows this introduction.

In this publication, unlike the others in Part II of the MCG series, the lessons do not include specific evaluation procedures. There are two reasons for the omission. First, this volume is designed primarily for college and university social studies methods educators, who may wish to incorporate their own approach to evaluation or have their students develop evaluation procedures as a class assignment. Second, the limitations of the length of the volume necessitated a trade-off between longer activities (including evaluation strategies) or more lessons. We chose the latter.

Dennis J. Weidenaar, professor of economics and director of the Purdue University Center for Economic Education, led the following team that prepared the publication:

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*Dennis J. Weidenaar, "The Role of Economics Education in the Professional Activities of College and University Social Studies Educators," Paper 490, Institute for Research in the Behavioral, Economic, and Management Sciences, Krannert Graduate School of Management, Purdue University, January 1975.

Concept learning: David Fell (associate professor of education, Frostburg State College) and Emily Melvin (assistant professor of education, Auburn University);

Inquiry: Ronald Van Sickle (associate professor of social science education, University of Georgia);

Skills learning: Margit McGuire (associate professor of education, Seattle Pacific University) and Elmer Williams (director, South Carolina Council on Economic Education, University of South Carolina);

Value analysis: Allan R. Brandhorst (associate professor of education, University of South Carolina) and Ronald Rosenblatt (assistant professor of education, Kansas State University);

Critique and editorial assistance: Ronald Galbraith (vice president of management development of education, Center for Health Studies [subsidiary of Hospital Corporation of America]), George Vredeveld (associate professor of economics, University of Cincinnati), and Jack Zevin (professor of education, Queens College).

The writing team created some of the activities especially for this guide; the rest are reprints or adaptations. The team is grateful to the authors and publishers of those activities for permission to reprint their materials. The team is also indebted to the Joint Council on Economic Education for its assistance. Finally, thanks are due to The Sears-Roebuck Foundation, whose generosity has made the publication of this volume possible.

CLASSIFICATION OF LESSONS BY ECONOMIC CONCEPTS*

(Abbreviations: *Con* = concept learning, *Inq* = inquiry, *Skl* = skills learning, *Val* = value analysis; *El* = elementary school, *Mid* = middle school, *Sec* = secondary school. Figures indicate page numbers.)

THE BASIC ECONOMIC PROBLEM

Economic Wants

What Do You Want?	*Con; El,Mid*	6
Now What Do You Want?	*Con; El,Mid*	7
Meeting a Demand	*Skl; Sec*	89

Productive Resources

What Do You Want?	*Con; El,Mid*	6
Now What Do You Want?	*Con; El,Mid*	7
The Double Delicious Company	*Con; El*	9
Time Is Money	*Inq; El*	27
A Trip to a Factory	*Skl; El*	69
What Does It Take?	*Skl; El*	72
The Duplicating Machine	*Skl; El*	74
What's the Pay?	*Skl; Mid*	76
Meeting a Demand	*Skl; Sec*	89

Scarcity and Choices

What Do You Want?	*Con; El,Mid*	6
Now What Do You Want?	*Con; El,Mid*	7
Picking and Choosing—Carefully	*Con; Mid,El,Sec*	18
What Do You Choose?	*Inq; El*	29
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Susan's Problem	*Val; El,Mid*	100

Opportunity Costs and Trade-offs

What Will It Cost Me?	*Con; Sec,El,Mid*	12
Vegetable Garden or Park?	*Val; El*	105
Environmental Choices	*Val; Sec,Mid*	108
Energy Policies	*Val; Sec,Mid*	111
Trade-offs of Trade	*Val; Sec*	115
An Energy Survey	*Val; Sec*	124

Marginalism and Equilibrium

When More Means Less	*Inq; Mid*	36

ECONOMIC SYSTEMS

Nature and Types of Economic Systems

Where Are the Workers?	*Inq; Sec*	50

Specialization, Comparative Advantage, and the Division of Labor

Working Together	*Con; Sec,Mid*	21
More Time for Play	*Inq; El*	23
Bookmark Factories	*Skl; El*	55

Voluntary Exchange

Have I Got a Deal for You!	*Con; Mid*	16

Interdependence

We Need Each Other	*Con; Sec,Mid*	20

Government Intervention and Regulation

An Energy Survey	*Val; Sec*	124

MICROECONOMICS: RESOURCE ALLOCATION AND INCOME DISTRIBUTION

Markets, Supply and Demand

By the Bottle, by the Bucket	*Inq; Mid,Sec*	30
How Much?	*Inq; Mid,Sec*	33
Place It Here!	*Inq; El,Mid*	[illegible]
In the Market	*Skl; El*	65
How Many Should We Buy?	*Skl; Mid*	79

The Price Mechanism

How Many Should We Buy?	*Skl; Mid*	79

"Market Failures": Information Costs, Resource Immobility, Externalities

Finding Out About . . .	*Skl; El*	62
Pleasantville	*Skl; Sec*	94
Environmental Choices	*Val; Sec,Mid*	108

Income Distribution and Government Redistribution

Who Gets What?	*Skl; Mid,Sec*	84

*From *Master Curriculum Guide*, Part I, *A Framework for Teaching Economics: Basic Concepts* (New York: Joint Council on Economic Education, 1977), p. 9.

MACROECONOMICS: ECONOMIC STABILITY AND GROWTH

Aggregate Demand: Unemployment and Inflation

Who Is to Blame?	*Inq; Sec*	42
Life During the Great Depression	*Skl; Sec*	87
What's the Relationship?	*Skl; Sec*	91

Price Level Changes

Who Is to Blame?	*Inq; Sec*	42

Money and Monetary Policy

Money, Money, Money	*Con; El,Mid*	14
Barter and Money Exchange	*Inq; El*	25

Economic Growth

Where Are the Workers?	*Inq; Sec*	50
What's the Relationship?	*Skl; Sec*	91

Savings, Investment, and Productivity

More Time for Play	*Inq; El*	23
Making More with Less	*Inq; Sec*	44
Bookmark Factories	*Skl; El*	55
The Duplicating Machine	*Skl; El*	74

THE WORLD ECONOMY

International Economics

Where Are the Workers?	*Inq; Sec*	50

MEASUREMENT CONCEPTS

Tables and Charts

More Time for Play	*Inq; El*	23
Time Is Money	*Inq; El*	27
What Do You Choose?	*Inq; El*	29
By the Bottle, By the Bucket	*Inq; Mid,Sec*	30
How Much?	*Inq; Mid,Sec*	33
When More Means Less	*Inq; Mid*	36
Who Is to Blame?	*Inq; Sec*	42
Making More with Less	*Inq; Sec*	44
Where Are the Workers?	*Inq; Sec*	50
Bookmark Factories	*Skl; El*	55
What Do You Choose?	*Skl; El*	60
How Many Should We Buy?	*Skl; Mid*	79
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CONCEPTS FOR EVALUATING ECONOMIC ACTIONS AND POLICIES

Broad Social Goals

Economic Goals	*Val; Sec*	120

1 CONCEPT LEARNING

In the literature, the word *concept* refers to a wide variety of thinking activities and appears as a synonym for such terms as "idea," "generalization," "structure," "topics," and "label." No universally accepted definition is currently available.* For purposes of this section, therefore, we use the following:

Concept is a mental construct (abstract idea) used to label, classify, group, or categorize a set of phenomena that have common characteristics. We call the elements of this set of common characteristics *defining attributes*.

Conceptualizing is the process of categorizing, classifying, and naming phenomena, and *concept learning* concerns the means by which teachers and students use and promote this process.

Conceptualizing, an important life skill, is essential in social studies. Concepts simplify and enrich the process of exchanging or transferring information. In the knowledge hierarchy, concepts are the building blocks for hypothesizing and generalizing, both of which are necessary for critical thinking. The Joint Council's *Framework* contains a set of basic concepts in economics, and several are used in the illustrative lesson plans below.

Table 1 presents a synthesis of the processes involved in concept learning. The two scenarios that follow the table are meant to depict the deductive and inductive approaches to such learning more vividly and concretely than do the simple outlines in Lessons 1.1 and 1.2. (Since the two approaches differ extensively in stages 1 and 2 but are essentially alike in the remaining stages, only scenario 1 is carried through all five stages.) Which approach teachers choose will reflect their judgment concerning the amount of teacher direction needed, their students' ability to think abstractly, and the complexity of the concepts to be studied.

Some educators believe teachers should weigh factors such as those below before choosing an approach for concept learning in a particular class. For example, a deductive approach may be most appropriate if:

—*students*' learning has dealt mainly with concrete rather than abstract ideas;

—*students* respond better to activities that are teacher centered rather than student centered;

—*teachers* are concerned about the class time available for introducing a concept (an inductive approach may take more time);

—*teachers* desire to convey a precise definition for a concept.

An inductive approach may be more appropriate if:

—*students* are familiar with brainstorming activities, have experience determining categories for data, and seem willing to develop labels for categories;

—*students* respond well to student-centered activities by assuming responsibility for a defined task (acting either in small groups or as an entire class);

—*teachers* are concerned as much with the development of student skills in processing data as they are with the introduction of a concept and are willing to devote the class time necessary for achieving these two objectives;

—*teachers* are willing to accept student definitions of concepts and are prepared to organize additional activities as necessary to polish or revise those definitions, i.e., test them against new information.

Some educators also believe that a combination of deductive and inductive approaches can be useful. They suggest carrying out deductive activities to provide a model or foundation for subsequent inductive lessons. It is, however, helpful for teachers to understand the differences between the two approaches and the criteria to use in selecting appropriate activities for a particular class and teaching style.

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* Concept: something conceived in the mind : THOUGHT, IDEA, NOTION. As a *philos* : a general or abstract idea : a universal notion : (1) : the resultant of a generalizing mental operation : a generic mental image abstracted from precepts; *also* : a directly intuited object of thought (2) : a theoretical construct <the ~ of the atom> b *logic* (1) : an idea comprehending the essential attributes of a class or logical species : a universal term or expression or its meaning (2) : a propositional function, logical relation, or property c : an idea that includes all that is characteristically associated with or suggested by a term : CONCEPTION *syn* see IDEA [From *Webster's Third International Dictionary of the English Language, Unabridged* (Springfield, Mass.: G. & C. Merriam Company, 1971).]

David Fell and Emily Melvin selected the lessons in this section and wrote the first draft of this overview.

TABLE 1. The Concept-learning Process

Deductive Approach	*Inductive Approach*
PRESENTATION PHASE	
1 CONCEPT IDENTIFICATION. Students are provided with the concept label as well as a definition, description, or explanation related to it as presented by an authority (teacher, text, expert).	**1 CONCEPT INTRODUCTION.** Students are given examples of the concept to be studied.
2 DEDUCING CONCEPT ATTRIBUTES. Students are given: **a** A set of examples of the concept; **b** Defining attributes common to all given examples;[a] **c** A description, diagram or outline of the concept derived from the information compiled in the preceding steps.	**2 DERIVING TENTATIVE DEFINITION OF THE CONCEPT.** Students brainstorm to: **a** Compile a list of the common defining attributes in the given examples;[a] **b** Describe, diagram, or outline the concept, using the information compiled in the previous steps; **c** Develop a label or name for the concept.
EXPANSION PHASE	
3 TESTING THE TENTATIVE DEFINITION OF THE CONCEPT.[b] Students test their definition with additional examples. Students should be encouraged to give both appropriate and inappropriate examples of the concept.[c]	
4 REFINING THE CONCEPT. Students refine the concept as the examples they offer in stage 3 introduce new attributes or relationships. Otherwise, students move immediately to Stage 5.	
5 APPLYING THE CONCEPT TO NEW SITUATIONS. Recognition and application of the concept to events other than those in the immediate class setting should occur as part of a continuous learning process.	

[a] With highly complex concepts, it may be necessary first to group the defining attributes into subcategories. For such an example, see Barry Beyer, *Teaching Thinking in Social Studies* (Columbus: Charles E. Merrill Publishing Co., 1979), pp. 197, 204.
[b] If the concepts are relatively simple, the activity may conclude with Stage 3.
[c] With a frequently encountered circumstance such as scarcity, contrary examples often seem contrived (e.g., cold air at the North Pole). In some cases, however, it is crucial for students to be able to give examples of the concept and its contrary or opposite.

Scenario 1. Deductive Approach

ECONOMIC CONCEPT: SCARCITY

STAGE 1. Concept Identification

At the beginning of class, Mr. Chen wrote the word *scarcity* on the board and pronounced it. Next, he asked the class to define the term. As he expected, no one responded. He then gave a definition: "Scarcity refers to the basic human condition that peoples' wants for goods and services are greater than the resources available for satisfying those wants."

STAGE 2. Deducing Concept Attributes

To reinforce the definition, Mr. Chen hung pictures of items he thought his students would want for playtime on the bulletin board: a bicycle, a soccer ball, a stereo, a model sailboat, a color television, a skateboard, and a pair of skis. When he asked the students, they agreed that they would like to own all these items. As a result of the class response, Mr. Chen labeled the objects pictured on the board as "wants." When he asked if there were additional items anyone would enjoy owning, a student volunteered that she would like to have a camera. So many suggestions followed that the teacher announced that the students' wants were apparently limitless.

"But what about your family's available resources to acquire all those things you want?" Mr. Chen asked. The students answered that it was not possible for their families to buy the entire array of articles. Not surprised at this response, Mr. Chen continued by stating, "Economists tell us the same thing about our country and our world that you've said about your family. In fact, there would not be enough of many things—raw materials, workers, factories—to produce all the items we want."

Mr. Chen continued by asking the students to state again the resources that appeared to be limited when related to the "wants" represented by the pictures on the bulletin board. The students repeated those mentioned by the teacher (raw materials, workers, factories) with some prompting. Mr. Chen then asked for the name of the condition existing when "there are not enough resources to satisfy wants—for one person, a family, or a country." When a student responded, "Scarcity," and other classmates agreed, Mr. Chen nodded in support and the lesson proceeded.

STAGE 3. Testing the Tentative Definition of the Concept

Although Mr. Chen seemed pleased with the students' responses, he was not sure that they really understood scarcity. Therefore, he presented an example illustrating scarcity of *productive* resources. First, after cautioning them that recess was still an hour away, he asked, "Suppose all three classes wanted to play soccer during the recess? Would that be possible?" "No," one student offered, "because we have only two soccer balls." "But could all classes play soccer at recess if we had enough balls?" Mr. Chen continued. When a member of the class pointed out that there would not be enough room on the playing field for three games, Mr. Chen observed that space or land could be a scarce resource.

Feeling confident that the students would understand scarce resources with one more example, Mr. Chen asked, "Suppose I were very rich and decided to give each of you $20,000 to install in-ground swimming pools in your backyards provided you could have the pools ready for use one week from today. What resource(s) might be scarce and so would prevent the pools from being completed on time?"

One student who lived in an apartment said he didn't have a backyard. "Then, land would be your scarce resource," said Mr. Chen. Another student said it would take longer than a week to install such a large number of pools. "Suppose it takes only a week to install an in-ground pool?" Mr. Chen countered. "If a week's time is long enough to install one pool, why couldn't we install all the pools in one week?" After a long silence, one student cautiously volunteered, "I don't think there are enough pool

builders or machines to get the jobs done in one week." Mr. Chen was delighted that the students had been able to give examples of land, labor, and capital goods as scarce resources.

STAGE 4. Refining the Concept

But Mr. Chen still had one more concern—that students might not be aware that a resource is scarce only if wants for that resource exceed its availability. "How many of you have been to the parking lot at the professional football stadium?" he asked. He waited for a show of hands and then continued. "What is scarce there on a Sunday that is not scarce on a Tuesday?" "Parking space," a student offered. "But aren't there the same number of parking spaces there on a Sunday as there are on Tuesday?" he asked. "Yes," they agreed. "Then what makes an item scarce is not the amount of the resource alone, but the amount in relation to the want for the item. No matter how big the supply of resources, if people still want more of it than is available, it is scarce. Do you see that?" he asked.

STAGE 5. Applying the Concept to New Situations

"Now," Mr. Chen concluded, "let's repeat our definition of scarcity: Scarcity refers to the basic human condition that peoples' wants for goods and services are greater than the resources available for satisfying those wants. For tomorrow," he said, "I want each of you to bring at least one example of a new situation in which you think scarcity exists."

Scenario 2. Inductive Approach

ECONOMIC CONCEPT: SCARCITY

STAGE 1. Concept Introduction

When Mr. Chen arrived to begin the social studies class, he was carrying an armful of mail-order catalogs. The students wondered what was going to take place. Mr. Chen started the lesson by asking the students to examine the catalogs, clipping out illustrations of goods they would like to acquire for use in their free time. The students clipped out pictures of the following items and attached them to the bulletin board: a bicycle, a soccer ball, a stereo, a model sailboat, a color television, a skateboard, and a pair of skis.

STAGE 2. Deriving Tentative Definition of the Concept

Mr. Chen then looked at the pictures and asked, "How are all these articles alike?" Some puzzled looks followed his question, but someone answered, "They are all things used for fun." Mr. Chen agreed and asked the students to describe some experiences they had enjoyed as a result of using some of the items in the array. Following that discussion, he asked for specific ways in which the items were alike or not alike. After some further teacher-directed discussion, Mr. Chen posed this question: "How many of you would like to own these playtime items?"[1] Everyone chorused, "I would!" Mr. Chen asked if anyone could suggest a term for a group of things that people would like to own. When no one answered, the teacher said, "Economists call them 'wants.'" He continued by asking, "Do any of you have some additional wants you would like to add to our bulletin board display?" Quickly, students turned back to the catalogs and added a picture of a fielder's glove as well as one of a camera. Mr. Chen asked if all students in the group always had their wants satisfied. Much discussion followed, and the group concluded that individuals, families, and nations rarely, if ever, satisfied all their wants.

To illustrate why it was impossible to satisfy all wants, the teacher raised a series of questions prompting investigation by the students. He asked, "What things, people, and skills are essential for producing the items you have picked out?" After some discussion, Mr. Chen wrote the terms "raw materials," "workers," "factories" on the chalkboard to promote a further exchange of ideas. Students found the definitions for the words and, with the teacher's guidance, determined how the words were related to the issue. The teacher accomplished this by having the students answer questions he posed such as "What do these words have in common?" "How could the things represented by these words help to satisfy our wants?" "Why can't these factors of production always satisfy our wants?" "Why do these words seem to belong together?" "What pictures do these words create in your mind?" After the students had made a considerable effort to analyze the problem, Mr. Chen prompted them by stating that the term he had in mind was "resources." When the students had worked out the definition for this concept, they described the various "resources" or "factors of production" they were familiar with in their own locality. Mr. Chen asked, "Does our locality have some factors of production that other localities do not have?"

After class discussion related to these questions, the teacher returned to the scarcity theme. He asked, "Do we have more wants or more resources in our lives?" Students responded that wants outnumbered resources. Mr. Chen continued, "Do we have enough resources to produce some of our wants?" "All of our wants?" "Some, or all, of everybody's wants?" Discussion followed in which the students and teacher agreed there were not enough resources to satisfy individual, family, or national wants. Mr. Chen asked the students what condition prevailed when wants were not satisfied. After the students had talked this circumstance over and were unable to propose a term, Mr. Chen suggested, "Economists describe this circumstance as 'scarcity.'" Someone volunteered to find the term in the dictionary and read out the definition. Then Mr. Chen posed a number of questions to reinforce the students' understanding of scarcity as "the condition present when there are not sufficient resources to satisfy wants."

Stages 3, 4, 5. These are the same as in Scenario 1.

1 Note that the term "playtime items" is also an appropriate *conceptual* label for these goods. However, the attributes of play are not essential to the classification.

1.1 What Do You Want?

GRADE LEVEL Elementary (as part of unit dealing with the ways individuals or families satisfy their wants); middle school, if emphasis of unit is appropriate

TEACHING METHOD Deductive

ECONOMIC CONCEPTS Scarcity; economic wants; productive resources

OBJECTIVES Students will demonstrate their understanding of scarcity by:

1 Designating which pictured recreational goods they want;

2 Naming additional wanted items;

3 Recognizing that economic wants are virtually limitless by compiling a long list of personal economic wants;

4 Listing resources (factors of production) used in the production of goods that will satisfy wants;

5 Recognizing that the amount of resources available is not adequate to produce all of society's wants by comparing the list of wants and the list of resources;

6 Defining scarcity as an ever-present condition that exists because wants (unlimited) exceed resources (limited) available to satisfy these wants.

MATERIALS Pictures of goods students are likely to want for playtime (bicycle, soccer ball, stereo, model sailboat, color television, skateboard, skis); chalk and chalkboard, bulletin board, tacks.

PROCEDURES

1 Write the word *scarcity* on the chalkboard and pronounce it. After verifying that no one knows its correct meaning, pronounce it again and define it. (*Deductive: Stage 1* begins.)

2 Mount pictures on the bulletin board and ask whether the students would like to have the items represented by the pictures. (*Deductive: Stage 2* begins.)

3 Tell the class that these are wants and label the objects accordingly.

4 Invite the class to suggest other items they would like to have for playtime and write the names of the items on the board or draw simple pictures of them. Conclude by pointing out to the class that their wants seem to have no ends or limits.

5 Ask the class whether there are enough resources in the world to produce all these things for all the children in the world who might want them.

6 State directly (or ask and answer questions which suggest) that raw materials, workers, and factories are limited productive resources. Ask the class to repeat the names of the limited resources after they have all been stated. (In middle school, the terms "human resources" and "capital goods resources" might be substituted for "workers" and "factories.")[1]

7 For reinforcement, ask, "What do we call the condition that exists when we as persons, families, and nations don't have adequate resources to satisfy our wants?" Reinforce "scarcity" as the correct answer, pointing to it on the board again.

8 Present examples to reinforce understanding of natural, human, and capital goods factors as scarce productive resources and ask students to name the scarce resource(s) in each example. (*Stage 3.*)

9 Present an illustration about parking space at a professional football stadium to show that a resource is scarce only in relation to our wants for that resource. (*Stage 4.*)

10 Having stated and refined a definition of scarcity, ask students to bring to class the next day a new example of the condition. (*Stage 5.*)

SOURCE: Written for this project by David Fell and Emily Melvin.

1 Students frequently think of money as an economic resource. Technically, this is not correct; money is a medium of exchange which people receive in payment for their services and then use to purchase goods or services.

1.2 Now What Do You Want?

GRADE LEVEL Elementary, as part of unit dealing with the ways individuals or families satisfy their wants; middle school, if emphasis of unit is appropriate.

TEACHING METHOD Inductive

ECONOMIC CONCEPTS Scarcity; economic wants; productive resources

OBJECTIVES Students will demonstrate their understanding of scarcity by

1 Designating pictured objects as playtime items they want to have;

2 Naming additional wanted items;

3 Recognizing that economic wants are virtually limitless by compiling a long list of personal economic wants;

4 Listing resources (factors of production) used in the production of goods that will satisfy wants;

5 Recognizing that the amount of resources available is not adequate to produce all of society's wants by comparing the list of wants and the list of resources;

6 Defining scarcity as an ever-present condition that exists because wants (unlimited) exceed resources (limited) available to satisfy these wants.

MATERIALS Mail-order catalogs, scissors, chalk, chalkboard, tacks, and bulletin board.

PROCEDURES

1 Distribute catalogs and scissors and ask students to cut out pictures of playtime goods they would like to have. (*Inductive: Stage 1* begins.)

2 Have students mount their pictures on the bulletin board as they complete their task.

3 Ask students what the displayed items have in common, accepting and testing all logical answers but cueing students to the idea that all pictures represent desired or wanted objects. (*Inductive: Stage 2* begins.)

4 Ask students whether they would agree with the label "wants" for this list. Define "wants" and suggest it might be a term economists would use.

5 Ask the class to add other items to its list of wants.

6 Ask students whether their wants are always satisfied.

7 Ask questions to help students discover what factors are necessary for producing these wants (goods).

8 Write the words "raw materials," "workers," "factories" on the chalkboard.

9 Ask what the words in step 8 mean. Provide cues to lead students toward appropriate answers (particularly for the term "raw materials").

10 Ask how the factors named in step 8 are alike, as well as how they might be used to satisfy wants. Ask what pictures the words create in students' minds and why the words seem to belong together. Provide cues to suggest that these words name resources that help to produce goods and services people want.

11 Ask whether "resources" would be a good label for these words. Allow students to use textbook glossaries to find the meaning of the term. Ask what resources are available locally.

12 Ask the following questions, allowing discussion as necessary after each question: (a) Do we have more wants than resources or more resources than wants? (b) Do we have resources to produce some of our wants? All of our wants? All of society's wants?

13 Ask the class to describe the relationship between wants and resources.

SOURCE: Written for this project by David Fell and Emily Melvin.

14 Tell students they have discovered an important economic condition. Ask if anyone knows what economists call this situation?

15 If necessary, introduce the word *scarcity* to explain the condition; ask the class to state the relationship between wants and resources that scarcity describes.

16 Present a series of examples to reinforce student understanding of the factors of production—natural, human, and capital goods—as scarce resources and ask students to name the scarce resource in each example. (*Stage 3.*)

17 Present an illustration about parking space at the professional football stadium to show that a resource is scarce only in relation to our desire for it. (*Stage 4.*)

18 Have students refine, if necessary, and state the definition of scarcity again. Ask them to bring a new example of scarcity to class the next day. (*Stage 5.*)

1.3 The Double Delicious Company

GRADE LEVEL Elementary

TEACHING METHOD Deductive

ECONOMIC CONCEPT Productive resources

OBJECTIVES Students will demonstrate their understanding of productive resources by:

1 Listening to the case study and answering questions about it;

2 Drawing pictures of resources necessary to produce a farm good.

MATERIALS Case study, "The Double Delicious Company"; classroom set of copies of the Apple Resource worksheet (Handout 1.3A); crayons

PROCEDURES

1 Print on the chalkboard:

Natural Resources + Human Resources + Capital Goods Resources = Product

2 Draw a picture of an apple on the chalkboard. Ask students what resources are used to grow, harvest, and sell an apple. Provide hints if necessary: land, water (natural resources), people to pick apples (human resources), fruit trees, ladders, bins, fruit stands, boxes, wagon (capital goods resources). As students name a resource, help them decide how to classify it, whether as a natural, human, or capital resource.

3 Give a copy of the Apple Resource worksheet to each student. Have students draw pictures on the worksheet of items illustrating the three categories of productive resources used in growing, harvesting, and selling apples.

4 Read "The Double Delicious Company" to the students (story follows lesson plan).

5 Discuss the story with the students, involving everyone. (Have students share their answers with a classmate first and then with the whole class.)

Questions for the Double Delicious Company story

a What did the Double Delicious Company produce? (Apples.)

b What resources did Johnny and Jennifer use in their company?

(natural = tree, land, water)
(capital goods = wagon, crates, fruit stand)
(human = themselves)

c How did the Double Delicious Company help Johnny and Jennifer buy the skateboards they wanted? (The children sold the apples in exchange for money, which they used to buy the skateboards.)

d Can you think of other items people could sell?

e What resources would be necessary to produce the products in question **d**? (List in three categories provided.)

f Would you like to have a business of your own like Johnny and Jennifer's? Why, or why not? What business would you choose?

g What resources would you need to run your business? (List by category.)

THE DOUBLE DELICIOUS COMPANY

Johnny and Jennifer Green are twelve-year-old twins. On their sixth birthday, their parents gave them a very special present. Guess what it was! It came in a big pot, had leaves, and a photo of a delicious-looking red fruit was tied to it. If you guessed "apple tree," you're right!

Johnny and Jennifer weren't very excited about the tree when they received it; they were hoping for toys. In just six years, though, Johnny and Jennifer have come to appreciate the tree very much.

Their parents helped them plant their birthday present. Now, just six years later, the tree has grown

SOURCE: This activity is based on the lesson designed by Margit McGuire and Diane Reinke, *The Book Company* (Washington State Council on Economic Education, 1979), pp. 27–32. Used with permission of the Washington State Council on Economic Education.

very large. It produces big, red, juicy, delicious apples. M-m-m-m, are they good! Johnny and Jennifer are glad that they watered the tree, weeded around the tree, pruned the tree, and sprayed the tree for insects. They are also thankful for sunshine and rain, which helped the tree grow.

Johnny and Jennifer like to pick the apples from their tree. They love to eat their apples. There is a problem, however: they can't eat all the apples that grow on their tree. They share some of the apples with their friends, but even their friends get tired of eating the fruit.

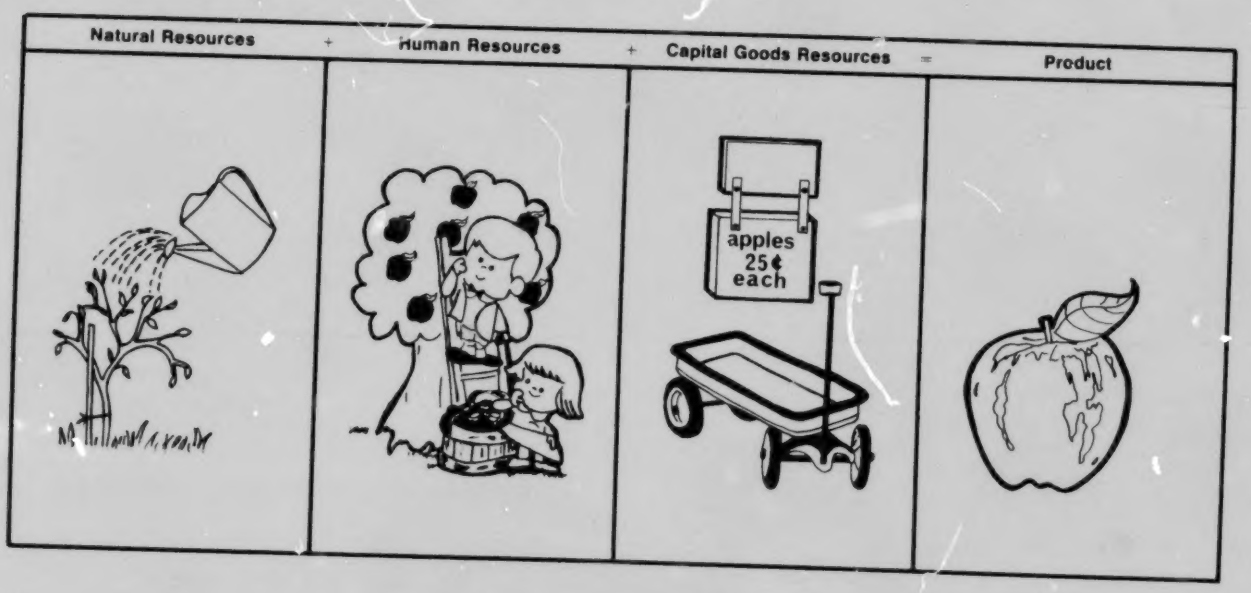
One day recently, Jennifer had an idea. She rushed into the garage, found some wood, nails, and a hammer, and started building a fruit stand. She told her brother Johnny her idea. He thought it was a good one and started to help her with the stand. They decided to share the work of picking the apples, carrying them to the fruit stand, and shining the apples. They also decided to call their business "The Double Delicious Company." They finally had all the things they needed to start their business—the fruit stand, the boxes in which to put the apples, the apples, a wagon to pull the boxes to the fruit stand, and the workers (themselves).

One bright, sunny morning the twins set up their business on the side of the road near their house. They were there only a short time when a car pulled over. A man got out and asked, "How much do the apples cost?" The twins both said, "25 cents each!" The customer said, "Wow, that's a good price! I'll take two apples." Lots of other people stopped at the stand that day, and everyone bought several apples. That night the twins counted their money. They had earned $8.50. The second day they earned $10.75. Before Johnny and Jennifer could start business on the third day, however, they had to pick more apples. They noticed that there weren't many apples left on the tree, and they returned to the fruit stand with only a few more apples. They sold all the apples they had left that day and earned $13.25. That's a lot of money. Do you know how much they earned altogether? ($32.50 is the correct amount.)

On the fourth day, Johnny and Jennifer picked the last of the apples and took them to the fruit stand. Soon they were sold out. They made $4.00, for a total amount of $36.50. They closed their fruit stand for the season.

Now, what are they going to do with their money? They want so many things. What do you think they should do with the money? Jennifer and Johnny want to buy a skateboard. They can buy one and have $10.00 left over. What do you think they will do with the extra $10.00? Do you think they should buy another apple tree?

TEACHER'S COPY OF APPLE RESOURCE WORKSHEET



Handout 1.3A

APPLE RESOURCE WORKSHEET

Name _____ **Class** _____

Directions: Answer the following question by drawing pictures of the resources and products in the spaces provided below.
What productive resources are needed to produce apples?

Natural Resources	+	Human Resources	+	Capital Goods Resources	=	Product

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

1.4 What Will It Cost Me?

GRADE LEVEL Although the examples of alternatives are most appropriate for secondary students, the process can be easily adapted for teaching elementary or middle school pupils by choosing simpler examples.

TEACHING METHOD Inductive

ECONOMIC CONCEPT Opportunity cost

OBJECTIVES Students will demonstrate their understanding of the choice-making process by:

1 Pointing out instances of choice-making in the examples;

2 Observing that every choice has an opportunity cost by giving examples of choices and costs;

3 Refining the concepts of choice-making and opportunity cost by using increasingly more complex examples;

4 Recognizing that individuals, groups, and nations must engage in choice-making and incur opportunity costs.

MATERIALS For each student, one set of choice-making cards illustrating personal opportunity cost (Card Set 1) and one set illustrating group opportunity cost (Card Set 2).

PROCEDURES

1 Distribute Card Set 1 to each student. The cards illustrate simple personal choices between two alternatives.

2 Ask the students to state how the five situations are alike. NOTE: Students can readily grasp that choice-making is common to all the situations. Provide cues to help students understand that something is given up when making each choice; for example, ask them whether each choice has a cost.

3 Suggest that opportunity cost refers to the value to the individual of what must be given up when decisions are made to use a scarce resource in a particular way.

4 Have students name the scarce resource in each situation depicted on the cards.

5 Have students state the opportunity cost of each choice in each example, e.g., if Peter chooses the varsity sport, his opportunity cost is the personal value of a part-time job; or if Peter chooses the part-time job, his opportunity cost is the personal value of participating in a varsity sport.

6 Ask students whether all choices people make involve only two alternatives.

7 Suggest alternatives or have the students give additional alternatives for the choices presented on the cards, e.g., Mary can baby-sit on Saturday night, go out with friends, or catch up on her sleep.

8 Tell students that in situations involving more than two alternatives, the opportunity cost of the first choice is the personal value of only the next most desirable choice, e.g., if Mary ranks her choices in this order: going out with friends, baby-sitting, and sleeping, the opportunity cost of going out with friends is the value to Mary of baby-sitting; if Mary ranks her choices as going out with friends, sleeping, baby-sitting, the opportunity cost to her of going out with friends is the value of sleeping.

9 Have students construct additional choice-making cards, stating the opportunity costs of particular choices.

10 Have students share their examples with the class, explaining their choices and opportunity costs.

11 Distribute Card Set 2 to each student. These cards illustrate two- and three-choice alternatives for groups.

12 Ask the class how the second set of cards is similar and how dissimilar to the first set. (Ans.: All cards in the first set involve personal decisions, while the second set concerns group decisions.)

13 Ask students to state the opportunity costs in Set 2, explaining their findings through class discussion.

14 Ask students whether they can name any personal or group decision that does not involve a cost.

15 Ask students to describe how opportunity cost relates to choice-making.

SOURCE: Written for this project by David Fell and Emily Melvin.

CARD SET 1	CARD SET 2
Peter can use his afternoon school hours to practice with the varsity or to work at a part-time job.	A company can process its peanuts to obtain peanut oil, peanut butter, or dry roasted nuts.
Ms. Sanchez can use the afternoon to wax her sports car or make a fancy dessert.	A firm can distribute its profit to stockholders or reinvest it in the firm.
Tina can spend part of her paycheck to buy a new record album or a new shirt.	A senior class can take its annual outing at an amusement park, a live concert, or a sporting event.
Mary can baby-sit on Saturday night or go out with friends.	The U.S. can sell its surplus wheat to the Peoples' Republic of China, give it away to a famine-stricken country, or store it for future domestic use.
Mr. Worthington can eat his fresh beans now or freeze them for use at a later time.	A community can authorize a recreational park or an industrial park.

1.5 Money, Money, Money

GRADE LEVEL Elementary (can be adapted for middle school)

TEACHING METHOD Inductive

ECONOMIC CONCEPT Exchange function of money

OBJECTIVES Students will demonstrate their understanding of the exchange function of money by:

1 Comparing and contrasting different kinds of exchange mediums (cattle, beads, personal possessions, currency, credit cards, checks);

2 Determining the strengths and weaknesses of each type of medium;

3 Participating in bartering and comparing it with the process of exchange using money;

4 Explaining that coins, currency, and checkbook deposits are typically used as mediums of exchange in our society;

5 Explaining why the use of money in trade is more efficient than barter in most societies.

MATERIALS Sheet with pictures of different mediums of exchange; items brought by students for barter; play money.

PROCEDURES

1 Hold up the sheet of pictures showing different exchange mediums (cattle, beads, currency, checks, and credit cards—credit cards are usually used like checks). Have students analyze each exchange medium and determine its good and bad features. If possible, list the features on the chalkboard as students point them out.

2 Ask students to bring object(s) from home to exchange with classmates.* In class, have students display and name the objects brought in. Begin the bartering by having each student exchange the object brought in for one brought in by someone else (multiple exchanges may occur).

3 Encourage students to describe what went on during the bartering; ask them to state what they brought in and what they received in trade. Find out how many exchanges were made before individuals obtained the objects they now possess. Ask if barter is what we typically use in our society today as a means of exchange.

4 Ask students to list the pros and cons of the bartering process they participated in and to decide whether or not the process is a practical one for our society.

5 Ask students to give examples of things typically used in our society as money. (Ans.: coins, currency, checks, credit cards.) Have students compare and contrast barter with the use of money, looking back to the picture sheet for examples of items used in bartering as well as to the classroom bartering activity.

6 Have students put prices on the items they obtained as a result of classroom bartering. Pass out the play money and use it to conduct another exchange. Then ask: Did the use of money make the process of exchange easier than bartering? more efficient?

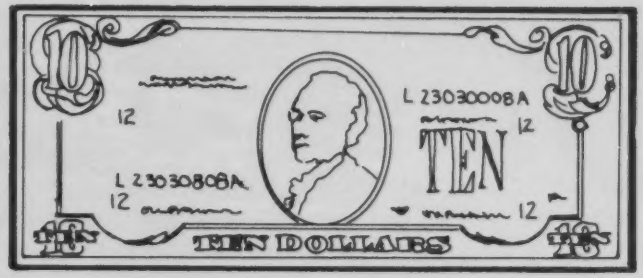
7 Conclude with a brainstorming session to determine the reasons for using money or barter in a society. (Ans.: To make possible the exchange of goods and services.) List the pros and cons of each method of exchange. Ask students to describe situations in which money exchange or bartering is the more efficient process (in the family, in class, between countries) and to explain the reasons for their conclusions.

* Set a ceiling on the money value of items to be brought in. In some circumstances, it may also be advisable to make parents aware that students will not be returning the items and to obtain parents' written permission.

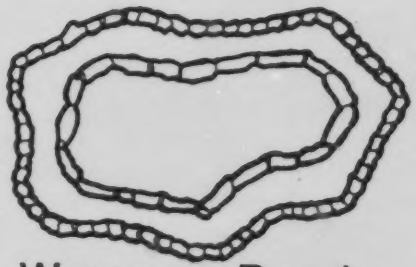
SOURCE: Written for this project by David Fell and Emily Melvin.

MEDIUMS OF EXCHANGE

Ax Money, Mexico

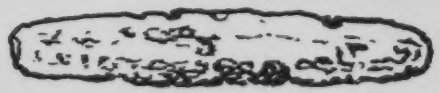


American Money

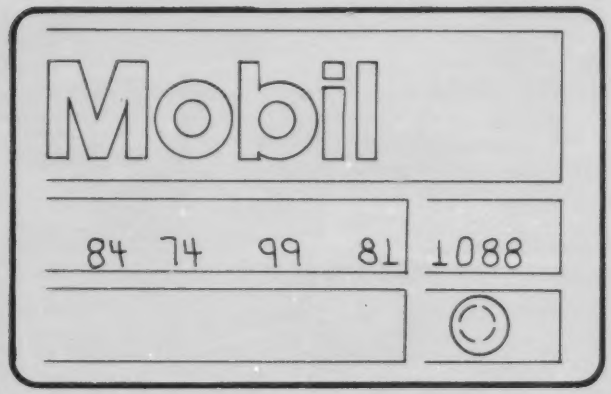


Wampum Beads, American Indian

Beetle Wings, Brazil



Silver Tiger Tongue, Laos



Credit Card

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

1.6 Have I Got a Deal For You!

GRADE LEVEL Middle school

TEACHING METHOD Inductive

ECONOMIC CONCEPT Voluntary exchange

OBJECTIVES Students will demonstrate their understanding of voluntary exchange by:

1 Describing trade or exchange as a basic economic activity;

2 Differentiating between cases of voluntary and involuntary or forced exchange;

3 Recognizing that participants in voluntary exchange should feel that their situation has been improved as a result of the action;

4 Recognizing that almost all goods and services in our society are acquired by exchange.

MATERIALS For each student, description of two sets of situations, one involving only examples of voluntary exchange (Set 1), the other including instances of involuntary exchange as well (Set 2).

PROCEDURES

1 Distribute Handout 1.6A. Ask students to read the descriptions in Set 1 (all voluntary) and find the attribute common to all five situations. NOTE: The idea of trade or exchange should emerge with little or no cueing; do not press for understanding of voluntary exchange or mutual benefit at this point.

2 Ask what each person offered and received (exchanged) in each situation. Classify the transactions as exchanges of goods or services, or some combination of these.

3 Ask students to determine whether each party benefited as a result of the exchange.

4 Now ask students to read the descriptions in Set 2 (voluntary/involuntary).

5 Ask students to observe whether the circumstances are different in any situations in the second set, cueing if necessary to help them recognize that two of the exchanges are involuntary.

6 Ask whether all parties benefited in the involuntary exchanges.

7 Ask whether in the absence of force or compulsion people would likely enter into a trade they thought would be harmful to their own interests.

8 Ask students to list the defining attributes of voluntary exchange and to give several other examples of voluntary exchanges between persons, firms, or nations. (Ans.: The parties engage in the transaction freely—without coercion—and each party is better off after the exchange than before.)

SOURCE: Written for this project by David Fell and Emily Melvin.

Handout 1.6A

VOLUNTARY AND INVOLUNTARY EXCHANGE

Set 1:

A At a restaurant, Mary tries one of Paul's shrimp; in return, he samples one of her scallops.

B Ricardo mows Mr. Herrera's lawn for $8.00 a week.

C Suzanne agrees to feed Bill's cat when he is on vacation if he will feed her tropical fish when she is on vacation.

D Hennie offers to wash Helen's moped if Helen will install Hennie's stereo speakers.

E Mrs. Fiorrito will tutor Jill in English for one hour if Jill will baby-sit with Joey Fiorrito for three hours.

Set 2:

A At gunpoint, Mr. Saleem is forced to give up his wallet; as a result of doing so quietly and quickly, he is not harmed.

B Joe cleans up the sporting goods shop in return for lessons from the tennis professional.

C Harry trades ten pounds of potatoes from his garden for seven pounds of beans from Sarah's garden.

D Stevie Wonder receives $50,000 for a concert he gives at Yankee Stadium.

E Sally broke Mr. Pedigo's window with her grand slam home run in a softball game. Mr. Pedigo told her she would not have to pay for it (and he would not tell her parents) if she raked his leaves the next Saturday.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

1.7 Picking and Choosing—Carefully

GRADE LEVEL Middle school, but can be adapted for elementary or secondary students. Students should have an understanding of scarcity and opportunity cost before starting this lesson.

TEACHING METHOD Deductive

ECONOMIC CONCEPTS Choice-making; scarcity

OBJECTIVES Students will demonstrate their understanding of choice-making by:

1 Deducing that choice-making is a problem stemming from scarcity;

2 Providing several personal illustrations of the choice-making process;

3 Defining the choice-making problem the class faces;

4 Listing alternative goods that can be purchased with a fixed amount of resources;

5 Listing criteria helpful in judging the alternatives;

6 Using the decision-making grid in the problem-solving model to choose an alternative.

MATERIALS Chalk and chalkboard; classroom set of copies of decision-making grid (Handout 1.7A)

PROCEDURES

1 Begin by reviewing the definitions of scarcity and opportunity cost.

2 Remind class that scarcity of resources forces all of us to make choices about our economic wants.

3 Ask class to list examples of choices they have had to make and have them describe how they made their choices.

4 Introduce the problem-solving model by listing its steps on the chalkboard as follows:

a Define the problem.

b List possible solutions.

c Develop and state criteria for judging the solutions.

d Apply the criteria for evaluating the alternatives.

e Make your choice.

5 To illustrate the use of the model, introduce a hypothetical dilemma: Tell the class it has $20 to spend for one of the following: a classroom globe, a basketball for the exclusive use of the class, or a last-day-of-school party.

6 Draw the decision-making grid on the chalkboard and give a copy to each student. Assist class in specifying the criteria for evaluating the alternatives presented in the hypothetical dilemma, e.g., educational value, wanted by most people, approved by parents, can be bought for $20, will provide enjoyment.

7 Break up the class into small groups. Ask them to follow the steps in the problem-solving model and mark their choices on the grid, using the criteria the class set up to evaluate the alternatives. If most of the group agrees that an alternative meets a criterion, the members should put a plus sign (+) in the appropriate space; if most disagree they put a minus sign (−) in the space; if there is no consensus they put a question mark (?) in the space.

8 Ask students to determine which alternative appears to meet the most criteria.

9 Ask class if the alternative chosen in step 8 is the one they prefer.

NOTE: It is possible students will not choose the alternative with the most plus signs (+); this could occur if students do not consider all criteria to have equal value.

10 To determine whether the students' participation in this activity has altered their understanding of choice-making, ask questions such as:

a Has your view of choice-making changed as a result of this experience?

b Do you think most people approach choice-making systematically? Do you think people should?

c Will your choice-making process be different from what it was before you took part in today's exercise? Should it be?

d Would a systematic choice-making process improve the decisions you make?

11 Give students a hypothetical problem to solve that is appropriate to their grade level, e.g., where to go on vacation, how to spend baby-sitting money or an allowance, what to do on a day off from school. Ask each student to solve the problem independently. Look for evidence students used the model.

SOURCE: Written for this project by David Fell and Emily Melvin.

Handout 1.7A

DECISION-MAKING GRID

ALTERNATIVES	CRITERIA				

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

1.8 We Need Each Other

GRADE LEVEL Secondary school, but usable for middle school

TEACHING METHOD Inductive

ECONOMIC CONCEPT Interdependence

OBJECTIVES Students will demonstrate their understanding of the concept of interdependence by:

1 Compiling a list of specialists working in the school and the goods or services they produce;

2 Listing goods or services not produced in the school but which are used there;

3 Explaining what the term *interdependence* means;

4 Drawing a diagram illustrating interdependence in the school and between the school and the locality;

5 Participating in a simulation that illustrates the dependence of the school on businesses in the community.

MATERIALS Chalk and chalkboard

PROCEDURES

1 Have students name the different jobs held in the school. Write the names on the chalkboard.

2 Ask students to help you compile a list of the goods or services provided by the school's employees. Write the list on the chalkboard.

3 Have students state what goods or services are *not* provided by the school's employees but are needed by it. Ask students how the school obtains the goods and services it uses that its own employees do not provide.

4 Using the answers obtained in the preceding step, begin a discussion of the meaning of the term *interdependence*.

5 Have students draw a diagram illustrating interdependence in the school. You may have to provide clues to get them started.

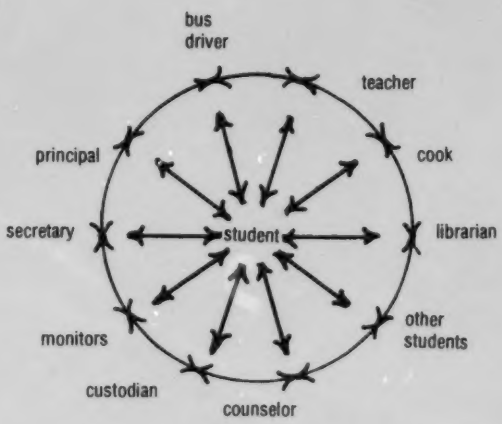
6 Have students play roles as employees and owners of local businesses that provide goods and services needed by the school, but which school employees do not provide. Ask the students to guess the identity of the establishments portrayed by the role-players. Have students make a list of the local businesses on which the school depends for goods and services.

7 Have students draw a diagram illustrating interdependence between the school and the local community.

8 Ask students what problems might arise if specialists such as teachers, police officers, and business owners and their employees stopped providing services or did a poor job. (Students should realize that we live in a specialized society: each of us must rely on others to provide some of the goods and services we use.)

9 Ask students to give examples of interdependence in their family, neighborhood, region, or country.

INTERDEPENDENCE DIAGRAM FOR STEP 5



SOURCE: Written for this project by David Fell and Emily Melvin.

1.9 Working Together

GRADE LEVEL Secondary; can be adapted for middle school

TEACHING METHOD Inductive

ECONOMIC CONCEPTS Division of labor; specialization

OBJECTIVES Students will show their understanding of division of labor and specialization by:

1 Listing production tasks to be performed by the class planning committee;

2 Recognizing that, on most jobs, tasks are assigned to workers according to the person's skills;

3 Giving examples of the relationship between the division of labor and interdependence;

4 Applying the principle of division of labor to the tasks involved in planning a specific school event;

5 Listing the advantages and disadvantages of division of labor;

6 Giving examples of division of labor in their homes.

MATERIALS Chalk and chalkboard

PROCEDURES

NOTE: *Division of labor* refers both to (1) the apportioning of work among individuals on the basis of personal skill and aptitude and (2) the breakup of productive processes into simplified tasks, as on an assembly line. In the latter case, the tasks are purposely uncomplicated, and the skills are easily acquired. In either case, the result is an increase in the output of goods and services. *Specialization* refers to the concentration by an individual on just that occupation or skill the person does best. Countries and regions may also specialize, producing those goods or services they are efficient at. Such specialization increases interdependence because the individuals, regions, and countries must rely on others for the goods and services they no longer produce themselves.

In the activity described here, both sorts of division of labor may occur: students may, for example, choose to prepare decorations or design invitations because of their skill and training in art. The breakup of the routine activities more closely exemplifies the second part of the definition.

1 Ask students to assume that the principal has invited them to plan a forthcoming school event, e.g., prom, senior reception, commencement. (Choose another event—for example, a school outing or a play—if students are not seniors.) Ask them to determine what tasks are involved in such an undertaking.

2 Have students decide whether they want to continue working as a single group on all the tasks or whether they want to divide the tasks among subcommittees; ask them to list the advantages and disadvantages of each approach.

3 Suggest to students that they have been discussing the economic concept of division of labor. Ask students to describe division of labor and conclude this step by writing a definition on the chalkboard. (Ans.: Division of labor is the separation into individual tasks of the total work required to produce a good or service. The separation may be made on the basis of aptitudes or skill or by breaking tasks down into simplified operations. In either case, the purpose is to increase efficiency and productivity.)

4 Ask students for examples of division of labor as an assignment of jobs on the basis of skill (e.g., artistic talent, knowledge of available entertainment groups, public speaking ability). Then ask for examples of division of labor as the breakdown of jobs into simplified activities requiring no specialized skill or talent. Ask students to describe or list some of the advantages of division of labor.

5 Ask students whether they can suggest any disadvantages associated with division of labor (e.g., people who participate in only a limited part of the work may not gain feelings of accomplishment or take pride in performing their task.) In discussion ask: Might there be any *economic* disadvantages?

6 Have students suggest other activities in which division of labor may occur (in their family, neighborhood, region, country).

7 Have students suggest activities that are not more efficiently performed by division of labor.

8 Ask students to develop generalizations about relationships between division of labor and the complexity of an activity.

SOURCE: Written for this project by David Fell and Emily Melvin.

2 INQUIRY

A major goal of most social studies teachers is to enable their students to acquire valid knowledge about society by drawing logical conclusions based on appropriate evidence. That is, the teachers want their students to learn how to inquire effectively into human behavior.

Inquiry is a systematic process of asking and answering questions about past, present, and future events. The process goes by many names including hypothesis testing, problem-solving, critical thinking, the scientific method, discovery, and reflective thinking, and applies to a wide variety of phenomena. The emphasis in all this is on empirical testing of beliefs (propositions, hypotheses) about events.

Students obtain data for answering the questions by reading, observing, interviewing, listening, and so on. The students can collect the data or can use data collected by others; whatever the source, the methods and results must lend themselves to objective verification.

There are many different outlines of the inquiry process; however, most of them state or imply the following steps:

1 Pose the question in such a way that it can be answered by logical analysis of data.

2 Propose hypothetical answers to the question.

3 State the kinds of evidence needed to support or reject each hypothesis.

4 Collect data relevant to each hypothesis and evaluate the reliability and validity of the data.

5 Logically test the adequacy of each hypothesis, using the highest-quality data obtainable.

6 Draw tentative conclusions regarding the accuracy of the hypothesis and the degree of confidence that can be placed in the conclusions.

The description of the process is, of necessity, linear, but the inquiry does not necessarily proceed in that way. For example, determining what kinds of evidence are desirable might suggest a more productive way to ask the question. Data collection activities might suggest additional hypotheses. Evaluating the adequacy of collected data might lead to another data source. The complexity of the inquiry will determine how much effort must be spent on each of the steps and how much backtracking is needed.

Although the study of economics provides an immense number of opportunities to use an inquiry instructional approach, there is much misunderstanding about the discipline. Yet, because many economic phenomena are central to our daily lives and to the operation of our society, it is easier for students to perceive the personal significance of economic topics and problems than of many other subjects. If students conclude that economics is relevant to their own lives, they will respond positively to inquiry instruction.

Teachers can select data collection procedures to fit students' skills and degree of intellectual sophistication. Much economic data is readily available in common reference books. Also, students can carry out indirect observation of economic phenomena in their own school and community. Furthermore, they can observe and simulate some economic phenomena in class. The following lessons illustrate a range of inquiry alternatives for teaching economic knowledge to students at various grade levels.

Ronald Van Sickle selected the inquiry lessons and wrote this overview.

2.1 More Time For Play

GRADE LEVEL Elementary

INTRODUCTION Students learn how division of labor can increase worker productivity. For a week, they collect and record data on the amount of time needed to clean up after art class. They use their data to test their hypotheses about alternative working arrangements. The activity can be useful in examining family roles and in establishing classroom management procedures.

ECONOMIC CONCEPTS Division of labor; productivity

OBJECTIVES Students will demonstrate their understanding of division of labor and productivity by:

1 Developing practical arrangements to clean up and put away art supplies quickly;

2 Collecting data with which to test their cleanup arrangements;

3 Explaining the relationship between division of labor and productivity.

MATERIALS

1 Clearly visible clock.

2 Blank forms for each group, similar to the following example:

PROCEDURES

1 For an entire week conduct an art period just before a regularly scheduled play period. (Plan art projects that will require considerable cleanup each day.) Divide the class into two or three groups. Explain that following the art period each group will be responsible for cleaning up and putting away its own art supplies. Members of the group may not begin their play period until they have completed their cleanup assignments. Point out to the students that the quicker they finish cleaning up, the more time they will have for play.

2 When the art period is over each day, have one student from each group keep track of the actual number of minutes the group takes to complete the cleanup and then record the amount of time in the appropriate column of the group's table. Another student in each group should then note and record the number of minutes the group has for play following cleanup. The teacher should approve the cleanup work done and check the accuracy of the notations in the table.

3 On the second day meet with each group separately before cleanup and discuss with the members how they might reduce their cleanup time. Student suggestions will probably involve division of labor. These suggestions are hypotheses to be tested at the end of the week with the data in the table. Remind

Day	Date	Time We Took to Clean Up	Time We Had for Play
Mon.			
Tues.			
Wed.			
Thurs.			
Fri.			

SOURCE: Adapted from *Master Curriculum Guide, Part II, Strategies for Teaching Economics: Primary Level* (New York: Joint Council on Economic Education, 1977), pp. 98–99.

the students that the group is dependent on each member to accomplish tasks quickly and correctly.

4 On the last day of the week, discuss with the whole class the results recorded in the tables. Ask why the time taken to clean up was less each succeeding day of the week (and accordingly the time available for play was greater). Some groups will probably prove to be more efficient than others, i.e., they will spend less time cleaning up. See if the class can suggest possible explanations (e.g., better division of tasks, more effort, better organization, experience—"practice makes perfect"). Emphasize the benefits of increased productivity (getting the task finished in less time) in terms of having more time for play. It is possible that some groups will not become more efficient during the week as measured by the time taken to clean up. Have children discuss why this was so. Perhaps someone in the group was absent or the group lacked leadership or the members didn't cooperate with each other.

5 Have the children discuss how they might be more productive at home. Have the children explain how being more productive at home might benefit them.

2.2 Barter and Money Exchange

GRADE LEVEL Elementary

INTRODUCTION By actively participating in a barter system, students test some hypotheses about the limitations of direct exchange of goods and services (barter). In discussion, students consider how money exchange reduces or overcomes some of the limitations of bartering.

ECONOMIC CONCEPTS Barter; money exchange

OBJECTIVES Students will demonstrate their understanding of money as a medium of exchange by:

1 Proposing hypotheses about the difficulties of making direct exchanges of goods and services;

2 Listing ways by which the use of money facilitates the production and exchange of goods and services.

MATERIALS Provide five objects for each member of the class for bartering, for example, five marbles, five baseball cards, five crayons, five pencils, five erasers, five balloons. Two or more students can each have a set of the same items.

PROCEDURES

1 Begin by conducting a discussion along the following lines: "Let's make a list of what everybody has to trade." (For primary grade children, draw pictures on the chalkboard of the items as they are named, and label the pictures. Otherwise, list the items on the chalkboard as they are named.) Explain: "Trading things, or the direct exchange of goods, is called barter." (Write *barter* on the board.) "Today we are all going to get a chance to trade things we already have for other things we want. For example, suppose Johnny has some cookies and wants a baseball card. He can go to Susie and try to trade some of his cookies for one of her baseball cards. You must work out the trades for yourselves—for example, you must decide how many cookies you will trade for how many cards. You will also have to figure out what to do if you want something but are unable to trade what you have for it. For example, suppose you want some of Susie's cards, but she doesn't want your cookies. What would you do then, Johnny?" (Try to elicit from the students the idea that they might have to engage in a sequence of trades to get a wanted object by bartering.)

2 Ask: "Do you see any difficulties in getting what you want using a barter system? Let's list them on the chalkboard." Students will probably suggest problems such as the large amount of time it might take to make a series of exchanges to get a desired item. The exercise in Step 4 will serve to test these hypotheses and reveal other, unexpected difficulties.

3 Continue the introduction: "Before we start, I want each of you to think for a moment and then make a list (or draw a picture) of three things other people have (remind them of the list on the board) that you want." (Each child makes a list or draws a set of pictures.) "After we finish bartering, we will look at our lists (or pictures) again and see how well we did—if we were able to get most of the things we wanted by bartering."

4 Tell students they may begin bartering but must stop after a specified amount of time, e.g., five to fifteen minutes. Agree with the class on an audible signal that will end the barter period. After the barter period ends, all exchanging stops and the students proceed with the discussion circle (Step 5).

You may want to set guidelines for appropriate behavior during the barter period, for example, instructions that exchanges must be made willingly (e.g., without physical force), and that standing rules on noise limits and safety must be observed.

5 Discussion circle. Have a few children describe exactly what they did during the barter period—the items they had, with whom they traded, and the amounts traded. Ask: "What problems did you have in bartering?" "Were you all able to get what you wanted by trading?" "Which hypotheses on the chalkboard are supported and which not supported by your experience?"

Possible answers: Difficulty in finding a trade; someone wanting your item and your not wanting theirs; necessity of bartering through a chain to get what you want (e.g., A wants B's goods, B wants C's goods, A exchanges with C in order to be able to trade with B); difficulty in setting exchange rates between dissimilar and indivisible items (e.g., deciding how many marbles you must give for one baseball card);

SOURCE: Adapted from *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Intermediate Level* (New York: Joint Council on Economic Education, 1978), pp. 49–50.

entire time could be spent searching for someone with whom to make an exchange; variation in bartering styles (e.g., aggressive vs. timid); sense of frustration or anger at not finding an exchange; happiness or unhappiness with classmates' behavior (e.g., not taking turns, yelling).

6 Ask: "Does anyone have any suggestions as to how we might be able to make it easier to exchange things we have for things we want?" Keep the discussion going until the idea of a money exchange system emerges. If necessary, ask the children how our economy manages the exchange of goods and services. Ask the children how they usually get something they want at a store? What did they (or, more realistically, their parents) have to "trade" for the money they used to buy things? Examples: knowledge, labor, goods. (Students may cite specific professions or jobs—doctor, lawyer, mechanic, shoestore owner.)

7 Ask: "How do you think a money exchange system can help to reduce some of the problems of the barter system which you experienced today?" If possible, write the answers on the chalkboard.

Possible answers (with some prompting): Less time looking for an exchange since the buyer does not need to offer goods but only money; easier to establish exchange rates—goods and services can be "divided" via the money prices established for them; easier to establish relative value of dissimilar items by their prices; easier to carry around money than some goods.

Emphasize that a money exchange allows people to specialize in the production of any of a number of items. In a barter exchange, people must usually limit themselves to producing only items they will be able to trade directly for what they want.

2.3 Time Is Money

GRADE LEVEL Elementary

INTRODUCTION Students learn that labor time is a limited resource and that money spent on an item can be equated with the time it takes to earn that money. The goods and services students buy to satisfy their wants require money income. Whether earned or received as an allowance, the students' money income is limited. The time it takes to earn that money income is also a limited resource.

ECONOMIC CONCEPT Human resources

OBJECTIVES Students will test hypotheses about the frequency with which they would have to perform a task and the total time it would take them in order to earn enough money to buy a particular item.

MATERIALS Chalkboard and chalk

PROCEDURES

1 Ask students as a group to select one item they would like to buy from a list you have previously prepared. (Either tell students what the retail prices of the items are or have them decide what the approximate prices would be.) For example, given a list of toys, students might select a bat kite that costs $1.50. Put a chart similar to the one below on the chalkboard.

THE BAT KITE
Price of one kite is $1.50

2 Have the students select a way of earning the money for buying the kite, e.g., emptying all wastebaskets at home for 5 cents a basket.

3 Have students use an "X" or select a special symbol to indicate how many times they would have to dump the wastebaskets to make enough money to buy the bat kite. Mark the chart on the chalkboard accordingly.

THE BAT KITE
Price of one kite is $1.50
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXX
300 minutes

4 Finally, ask students to speculate about how long it would take them to empty all the wastebaskets in their homes. Then ask students to use the hypothetical time to figure the total number of minutes of wastebasket emptying they would have to do to earn enough money to buy the bat kite. Ask them to write the number of minutes at the bottom of the table. The students should then perform the task and time themselves. Afterward, they should revise their hypothesis and the entries in the table to reflect their findings. (If the task the students select is one they cannot do in school—such as emptying home wastebaskets—plan to complete the rest of this lesson on another day).

5 If possible, students should repeat the previous steps using other goods and other tasks.

SOURCE: Adapted from *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Primary Level* (New York: Joint Council on Economic Education, 1977), p. 17.

6 Ask: What item (on the list in step 1) would take the longest time to obtain? Would the length of time be different if you chose another kind of job? Then ask: What would happen to children who chose not to work? Were you surprised at how much work was required to obtain a good or service? What surprised you the most?

7 To facilitate transfer of learning, ask: How many hours would a police officer have to work to buy a television? How many hours would a car mechanic have to work to buy a stereo? How many hours would a bus driver have to work to buy a camera? How many hours would a store manager have to work to buy a washing machine? (Students must estimate—or you must tell them—the hourly wage of each occupation in question, as well as the price of the goods to be bought.) How could we find out whether our answers are correct?

2.4 What Do You Choose?

GRADE LEVEL Elementary

INTRODUCTION Students investigate the effect of their tastes on choice-making in the absence of income and price constraints. The teacher constructs a simple chart and the students use the data it depicts to generalize about their choices. (The students, not their teachers, should make the generalizations.)

ECONOMIC CONCEPTS Choicemaking

OBJECTIVES Students will:

1 Indicate their first and second choices from a list of similar items, e.g., ice cream flavors, brands of cereal, TV programs, colors, pets, cars;

2 Propose and test hypotheses about their class preferences.

MATERIALS

1 Two colors of construction paper cut into approximately one-inch squares. (The colors are used to code the students' choices, for example, red for first choice; blue for second choice.)

2 Charts, entitled "desserts," "pets," "day of the week," etc., with six-inch lengths of masking tape stapled in position, sticky side out and labeled as shown in the diagram:

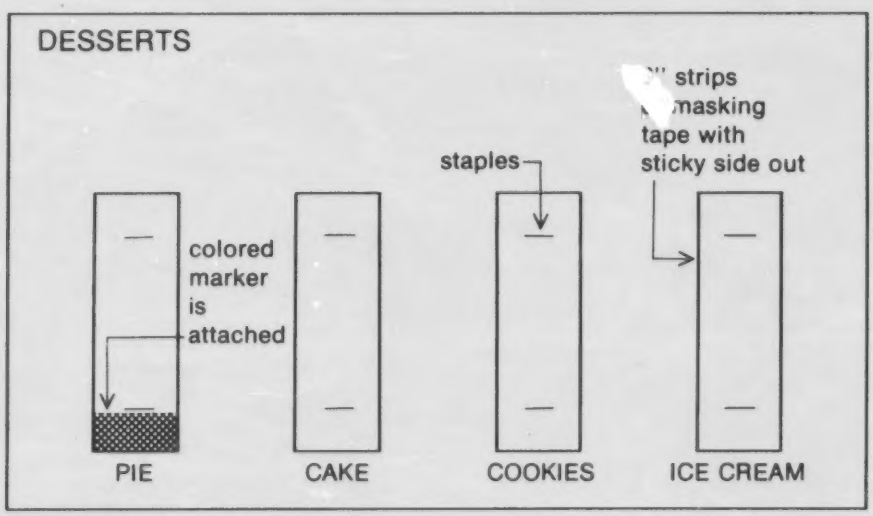
PROCEDURES

1 Demonstrate how to use the chart by attaching a marker to a length of tape on one of the charts.

2 Select one chart and let students decide on their first and second choices. Have a few students at a time go up to the chart and place their markers on it.

3 After the class completes step 2, help students generalize about the data in the chart. Ask: What item did most of you pick out as your first choice? As your second choice? (Have students give reasons for their choices.) Did all of you want the same thing? Why or why not?

4 *OPTIONAL.* What two items would you choose if the first item cost 10 cents, the second 25 cents, the third 50 cents, and the fourth $1.00? Call on individual students to explain their choices. (Children should relate their choices to the size of their allowances or other sources of pocket money and the prices of the goods offered.)



SOURCE: Adapted from an activity in *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Primary Level* (New York: Joint Council on Economic Education, 1978), p. 18, which is the basis for Lesson 3.2 as well. Teachers may wish to compare Lesson 3.2 with this one to see how an activity can be adapted to achieve various instructional objectives.

2.5 By the Bottle, by the Bucket

GRADE LEVEL Middle school; secondary school

INTRODUCTION Students conduct a simple market survey to find out how important it is to a producer to know the demand for a good or service, what effect age has on demand, and the impact of demographic changes on business. Students learn some economic concepts and are introduced to a useful technique for collecting social science data.

ECONOMIC CONCEPTS Demand

OBJECTIVES Students will:

1 Propose hypotheses about the relationship between soft drink consumption and the age distribution of the local population;

2 Collect data with which to test the hypotheses by conducting a survey of the local population;

3 Generalize about the effects of changes in the age distribution on the demand for products of various industries.

MATERIALS Survey form (Handout 2.5A)

PROCEDURES

1 Explain to students that they are going to carry out a procedure some firms use to decide how much of a good or service to produce. Indicate that people's jobs—including those of their own parents, relatives, and other adults—depend partly on the accuracy with which companies in each industry predict sales of their product or service.

2 Tell students that the example used in the lesson is going to be the soft drink (soda) industry. Ask students to estimate how many sodas they drink each year. Ask students if they think they drink more or less than the average person of their age. Ask how many sodas they think their parents drink each year. Write the estimates on the chalkboard.

3 Tell students that in 1977 consumption of canned soda (12-oz. can-equivalents) by persons 13 to 24 years old was estimated at 50 percent of total consumption, although that age group made up only 29 percent of the total U.S. population. The 25–44 year-olds, constituting 32 percent of the population, accounted for 35 percent of total consumption. The remaining 15 percent was consumed by those over 45 years old, who made up 39 percent of the population.* In other words, 13–24 year-olds constituted the best market for soft drinks.

4 The data will probably surprise most of the students. Some may even find the figures quite unbelievable. Ask: Do you think these statistics accurately reflect soft drink consumption in our area? (Yes? No? Don't know.) Have students answer by a show of hands. Write results, i.e., their hypotheses, on the chalkboard.

5 Propose that the class conduct a survey using the form in Handout 2.5A. Distribute the form and tell students how to record the data. Remind them that the summaries will be calculated in class.

6 After the data are summarized in class, ask students to compare their hypotheses about local consumption with the survey result. Tell students to recall the national data described at the beginning of the lesson. Ask the class to suggest reasons for any differences observed between the local and national

* Based on "The Graying of the Soft Drink Industry," *Business Week*, May 23, 1977, pp. 68–72.

SOURCE: Written for this project by Ronald Van Sickle

consumption patterns. Point out that both the national and local data may be deficient because of inaccurate recording, dishonest responses, and faulty memories of respondents.

7 Tell students to recall your earlier remarks that 13-to-24 year-olds consume the most soft drinks per year. Tell them it is predicted that by the late 1980s there will be at least 4 million fewer members of that age group than in 1975. Ask what implications that decline might have for total soft drink demand in the United States. (Ans.: Total demand should fall.) Then point out that the Coca-Cola Company is expanding its overseas distribution of Coca Cola and has bought the Taylor Wine Company of New York to help counter the anticipated drop in U.S. consumption of soft drinks.

8 Ask students what other industries might be affected by changes in the age distribution of the population.

Examples
baby food industry—decreased demand
nursing home industry—increased demand
wine industry—increased demand
education—decreased demand for teachers

9 Ask students to suggest other factors that might affect demand for a good or service.

Examples: fashion, income, availability of substitute goods or services, expectations about future prices

Handout 2.5A

MARKET SURVEY FORM

Name _____ **Class** _____

Directions: Try to find ten people in each age group. Ask them how many times they drank a soft drink in the previous week. Record each answer in the proper age column. (NOTE: Do not compute the summaries at the bottom of the page. They will be calculated in class.)

Person Interviewed	Age Group		
	13–24	25–44	45 and up
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Week's Total			
Annual Consumption (Multiply week's total by 52 to obtain annual consumption.)			
Annual Consumption per Capita (Divide annual consumption by number of people interviewed in age group.)			

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

2.6 How Much?

GRADE LEVEL Middle school; secondary

INTRODUCTION Students learn how changing conditions can alter the market demand for a product or service.The lesson gives special attention to time-related factors and to the availability of substitute goods. Students may also become aware of the difficult task producers and suppliers have in predicting how much of their product consumers will buy at various prices. Another purpose of the lesson is to show how innovation has affected traditional business and production arrangements. Finally, having students propose and test hypotheses about some of the relationships gives the class a psychological stake in the outcome of the tests.

ECONOMIC CONCEPT Demand

OBJECTIVES Students will:

1 Collect data and construct their class's demand schedule for a specified good;

2 Hypothesize about the effect on demand of the availability of a substitute good and collect data to test their hypotheses;

3 Construct a hypothetical demand schedule showing the effect on demand of a specified substitute good and test their hypotheses.

MATERIALS Several oranges and apples (or two other goods that are substitutes for each other); classroom set of copies of Handout 2.6A.

PROCEDURE

1 Auction off an orange to your students. Conduct the auction dramatically, if you can, so as to spark student interest. After completing the auction and giving the orange to the successful bidder, ask how many other students would like oranges. Tell the students that you will supply some but that first you want to determine the *demand* for oranges.

2 Introduce the concept of demand as economists would define it. Write the definition on the chalkboard:

> *Demand*. A list of various quantities (amounts) of a good or service that an individual or group is willing and able to purchase at different prices during a given period of time, all other things remaining the same.

3 Ask the students to help you in determining the demand for oranges in your class today. Put an uncompleted table like the one below on the chalkboard:

	Demand
Price	**Quantity**
30¢	
25	
15	
10	
5	
1	

4 Ask the class how many oranges each person will buy at 30¢ per orange and at each succeeding lower price. A show of hands and fingers should facilitate data collection. If possible, have one student help you take the count. Emphasize that students must indicate the quantity they will buy at each price as it is called out. Students who indicate a willingness to buy at a particular price must raise their hands at each lower price. They need not buy more at the lower prices, but they must express a willingness to buy some quantity. Emphasize that the oranges they are willing to buy must be consumed by them and their family and close friends.

5 Explain that the list of prices and related quantities obtained from the activity in Step 4 illustrates demand as economists define it. Refer to the definition in Step 2.

6 Illustrate how demand curves are generated by graphing the class data on the chalkboard. (Reminder: Leave the completed graph on the chalkboard for use in Step 10.)

7 Ask students to discuss the following questions:

a Why were some students willing to pay a higher price than others?

b Why is the demand curve almost vertical at high prices and almost horizontal at low prices?

c How would the demand schedule of an 8:30 A.M. class compare to that of an 11:30 A.M. class

SOURCE: Adapted from Dennis J. Weidenaar and Emanuel T. Weiler, Instructor's Resource Guide to *Economics: An Introduction to the World Around You*. © 1976, Addison-Wesley Publishing Company, Inc., portions of Chapter 3. Used with permission.

or a 3:00 P.M. class? Why would they differ? (Depending on what you sold, another comparison might be more appropriate.) If you have data from other classes, graph their demand curves and have your class test its hypotheses.

d What goods or services are characterized by greater demand at certain times? (Examples: flowers on Valentine's Day, restaurant meal on Mother's Day, tinsel at Christmas). How could you verify these hypotheses?

8 Distribute handout. Ask students to predict the demand for oranges and the demand for apples given that they can purchase either or both and to record their predictions on the handout.

9 Copy the blank table in the handout on the chalkboard. Now ask the class how many oranges and how many apples they want at each price, as in Step 4, and complete the table.

10 Draw the demand curve for oranges with apples on the chart on which you drew the demand curve for oranges only. Ask students to explain why the demand for oranges has declined. (Ans: Apples are a substitute good for oranges.)

11 Have students graph their predicted demand for oranges and have them explain why the predictions were or were not reasonably accurate.

12 Ask students for examples of other substitutable goods and services. (Examples: bus rides and taxi rides, chicken and beef, hamburgers and hot dogs, TV movies and local theater movies, bicycles and cars.)

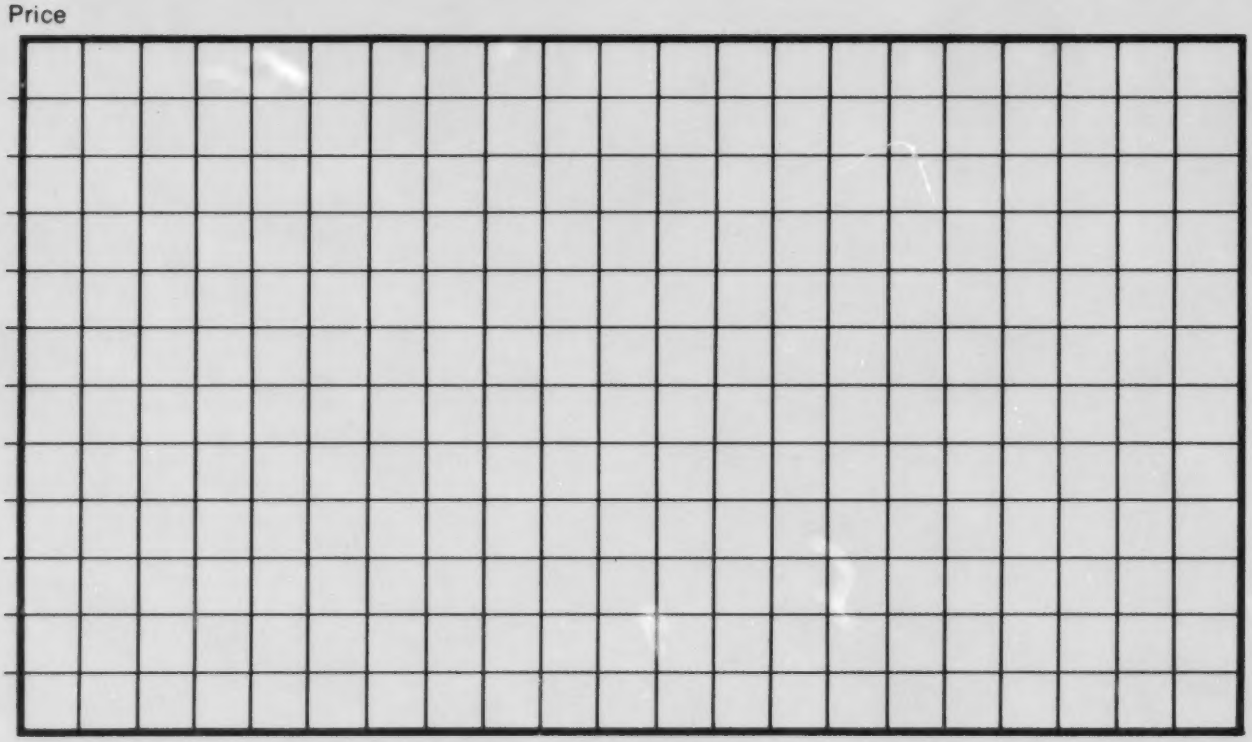
Handout 2.6A

Name _____ **Class** _____

Price	Demand for Oranges Actual Quantity	Predicted Quantity
30¢		
25		
20		
15		
10		
5		
1		

Price	Demand for Apples Actual Quantity	Predicted Quantity
30¢		
25		
20		
15		
10		
5		
1		

Price



Quantity

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

2.7 When More Means Less

GRADE LEVEL Middle school

INTRODUCTION This simulation of a production process provides students with data about the effect on output of increasing one factor of production (natural resources, human resources, or capital goods). Students attempt to predict changes in output before collecting data to test their hypotheses.

Essentially, this activity illustrates the law of diminishing marginal returns. When one factor of production is increased and all others in a production process are held constant, output increases slowly at first and then more rapidly. Beyond some point—the point of diminishing returns—the rate of increase of output slows and finally stops. Total output eventually levels off and begins to decrease absolutely.

Before beginning this activity, students should know what the term *factors of production* means.

This lesson can be used in the study of industrialization or the use of productive resources.

ECONOMIC CONCEPT Diminishing marginal returns

OBJECTIVES Students will:

1 Construct hypotheses regarding changes in total output and the rate of change of output resulting from gradual increases in one factor of production;

2 Collect data from the simulated production process with which to test their hypotheses.

MATERIALS

1 Several dozen sheets of 8½" by 11" paper

2 Two scissors

3 Three pencils

4 One small table

5 Three chairs

6 Wastebasket

7 Watch with second hand

PROCEDURES

1 Tell the students they are going to work in a new factory you are starting. Explain that you are making decorations (or toys, etc.) for sale. You know that your product will sell; however, you are not sure how many workers to hire.

2 Ask students how many workers you will need. Accept several answers, including "I don't know." Comment that it stands to reason that the more workers you have the more goods you can produce.

3 Show students how to make the product. Choose any object that can be made with paper, pencil, and scissors and that a student can complete at a rate of at least one every 30–45 seconds; snowflakes and airplanes are possibilities.

4 Put a table like the following on the chalkboard:

Workers	Total Units Produced	Marginal (Incremental) Unit Produced	Average Units Produced
1			
2			
3			
4			
5			
.			
.			
.			
15			

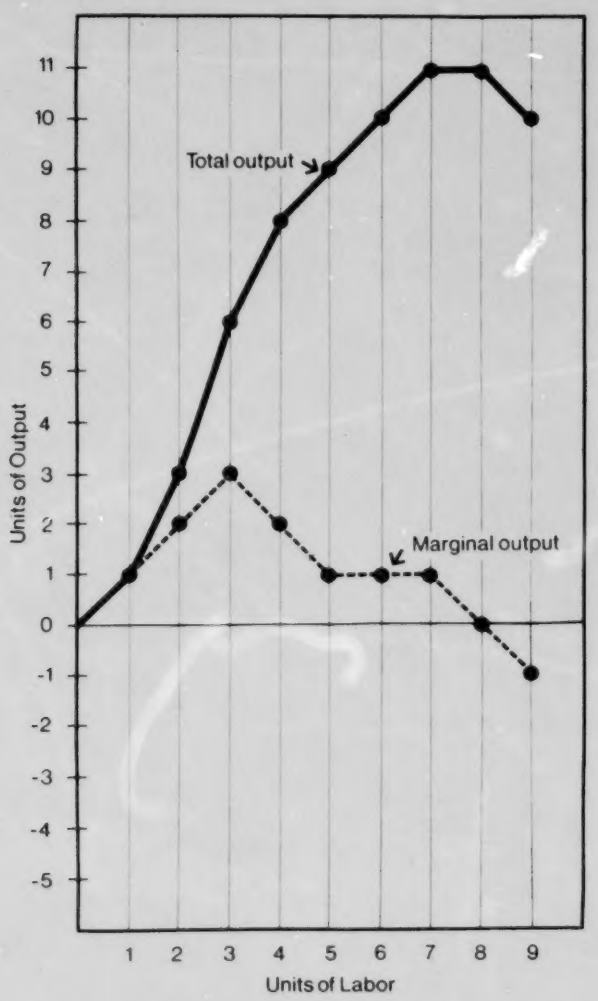
Offer a prize to the student(s) who can best predict how many units will be produced with the various numbers of workers. Students should record their hypotheses on separate sheets of paper. Also, ask them to describe their predictions in words. Write some of these hypotheses on the chalkboard.

5 Select a student to be the first worker and give the student 60 seconds to produce as many *complete* units as possible. You should serve as quality control manager throughout the simulation to prevent shoddy work. Record the total number of completed units. Then complete the marginal and average columns. Add a second worker, then a third, and record the results each time. Students will periodically reorganize to increase efficiency. Do *not* allow the introduction of any additional pieces of capital equipment, e.g., chairs, pencils.

6 Watch for total production to increase, level off, and begin to decline. Relate the behavior of total output to that of marginal output. Point out the level

SOURCE: Adapted from Dennis J. Weidenaar and Emanuel T. Weiler, Instructor's Resource Guide to *Economics: An Introduction to the World Around You*, © 1976, Addison-Wesley Publishing Company, Inc., portions of Chapter 2. Used with permission.

of total output at which marginal output begins to diminish. When this occurs, you can stop the activity. Be prepared to graph total output and marginal output (that is, the change in output resulting from adding each extra unit of labor input). The following data are from a particular class:



7 Tell students they will now compare hypotheses on the chalkboard with the results obtained from the simulation. Have students orally describe the changes in total output and marginal output as the number of workers increased. This is essentially the law of diminishing marginal returns. Evaluate each hypothesis and accept those that adequately express the condition.

8 Present the following questions for class discussion:

a Why at some point did it become harder to increase production by adding workers?

b Why did the change in production decrease with each added worker?

c Why did total production decrease?

d What characteristics of labor resulted in increased (or decreased) production?

e What would have made the added units of labor more productive?

f How did keeping the amount of capital equipment constant limit production?

g What changes in capital equipment could increase production?

h How could you have reorganized for more efficient production?

i To what extent were you responsible for increasing or decreasing production rates?

j Under what conditions could you have done your particular job better?

9 Determine which students made relatively accurate predictions. Graph their hypothetical data against the actual total output curve and choose winner(s).

2.8 Place It Here!

GRADE LEVEL Upper elementary; middle school

INTRODUCTION Students hypothesize about the relationship between geographic location and economic functions. On a map of the fictional town of Happy Valley (population 15,000), students select suitable locations for various businesses and other economic facilities. Solving the locational problems posed in the lesson forces students to consider the function of each economic facility and the implications of its geographic location in the area.

ECONOMIC CONCEPTS Markets, supply and demand

OBJECTIVES Students will demonstrate their understanding of the relation between location and economic function by:

1 Analyzing a geographical area and stating hypotheses about the best location for a variety of businesses;

2 Using a set of symbols to show the location of each business on their maps;

3 Developing generalizations about the relationships between economic functions;

4 Comparing their choices and applying their theories to local situations to test the validity of their conclusions.

MATERIALS REQUIRED

1 Classroom set of copies of the Happy Valley Map;

2 Chalkboard and chalk;

3 A display-sized map of the local neighborhood or community, showing the location of hospitals, department stores, schools, etc.

PROCEDURES

1 Distribute copies of the Happy Valley map and discuss it with the students. Ask them to interpret the symbols in the key and describe the area; draw their attention to the location of suburbs, highways, factories, rivers, streets, and to area variations in population density. Ask them to imagine homes, people, and businesses on the streets of the town and its adjacent communities.

2 Point out to students that Happy Valley has one department store, fifteen groceries and supermarkets, one high school, five elementary schools, eight doctors' offices, and two hospitals. List the facilities on the board as you mention them. Present the following preliminary questions for discussion:

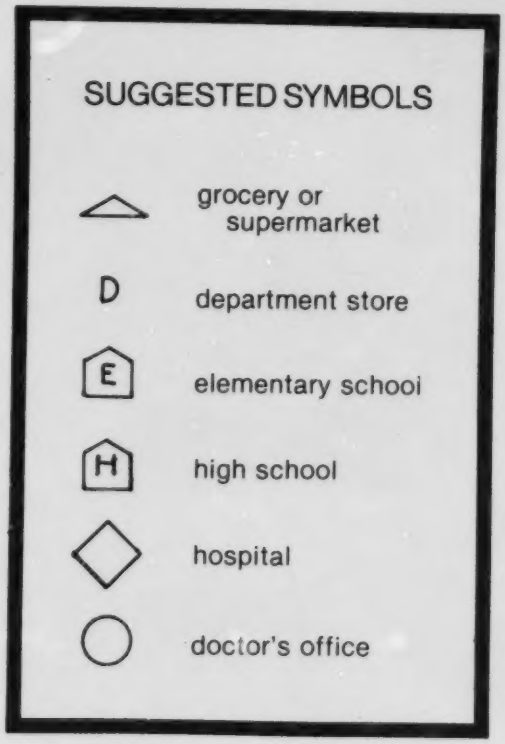
a Why are there more grocery stores than department stores?

b Why are there fewer hospitals than doctors' offices?

c Why only one high school but five elementary schools?

Write answers (hypotheses) on the chalkboard and save for further reference.

3 Go over the symbol for each facility (a suggested set appears below—you may devise others) and ask students to take a moment to think about what might be the best (most advantageous) location for each in Happy Valley. Tell students to write their hy-



SOURCE: Created for this project by Jack Zevin.

potheses and reasons on the backs of their maps and then draw the symbol for each facility in the chosen position on the face of the map. Students may work alone or in pairs. (Younger children might be asked to deal with only two related facilities at a time, such as doctors' offices and hospitals followed by discussion and a return to the next pair of facilities; older children may be asked to do all six at the same time if you feel the exercise will not be too complex or cumbersome.)

4 Upon completion of their maps, students should be asked to explain their choice of locations. (An opaque projector is useful because the whole class can then see each student's work in turn.) Encourage comments and discussion after each report and note similarities and differences in student hypotheses. Encourage a class discussion on the relation between the location of a facility and its economic function, using questions such as the following:

a Are supermarkets usually located in the same places as hospitals? Why or why not?

b Which locations on the map are best for each business or activity? Why?

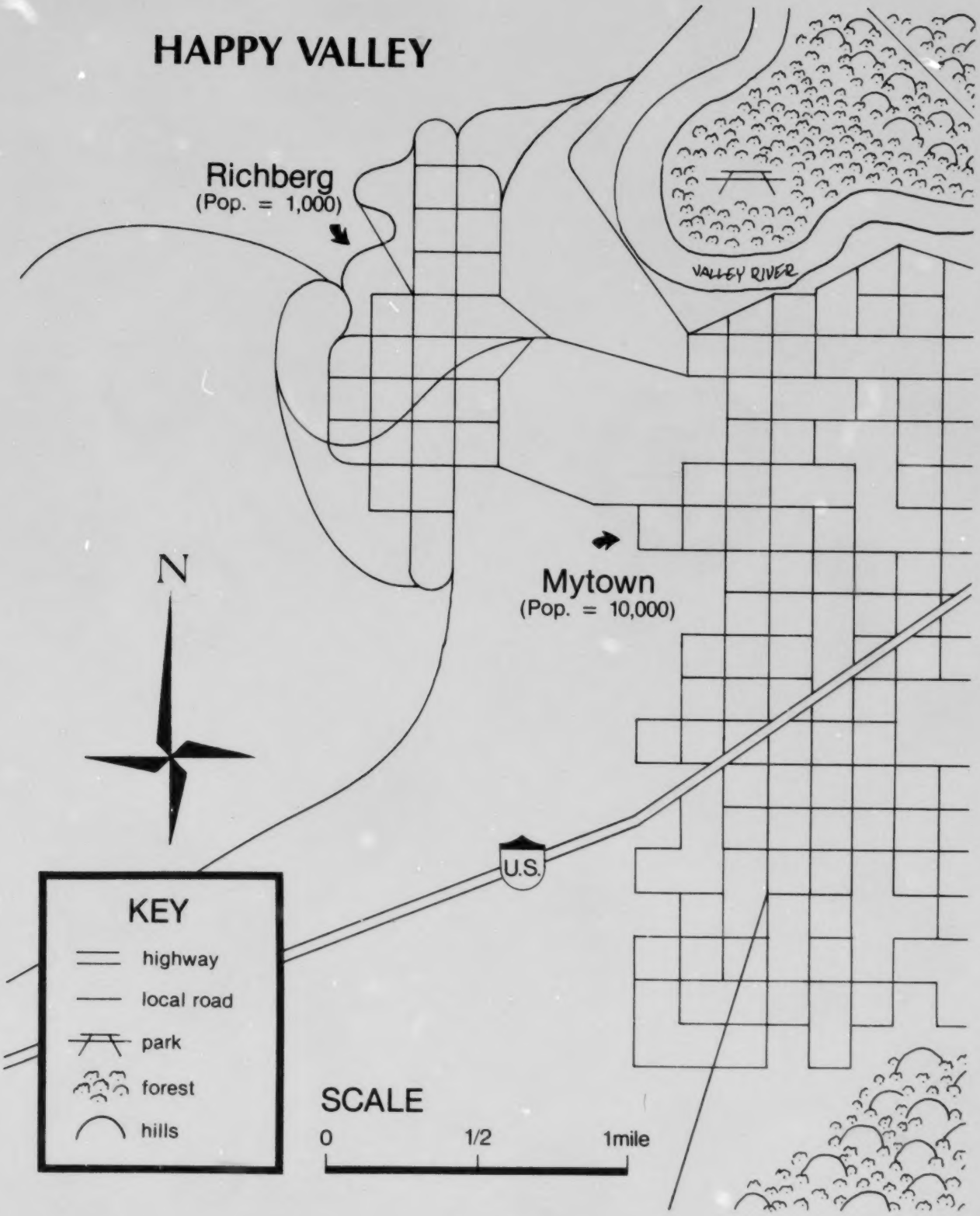
c How do you explain your choices for each facility such as supermarkets and hospitals, etc.? Does each follow the same rules or different ones?

5 Encourage students to generalize about the relative advantages of contrasting kinds of location, e.g., centrality vs. dispersion, highway vs. outlying streets.

6 Ask students to find out the location of different facilities in their own neighborhood, town, or county. If possible, provide a map showing the location of department stores, hospitals, schools, doctors' offices, and food stores. If a suitable map is unavailable, form committees to survey the area, listing the location and counting the number of hospitals, schools, etc. Suggest to students that they might check the Yellow Pages of the telephone directory for the number and location of facilities. They might also be able to draw a simple map of the area.

a Count up the number of times each economic function appears on the list or map for the local area and have students compare the results with the hypotheses about location and function that were proposed earlier. Have students cross-check and clarify their hypotheses.

b Ask students what rules they would now suggest for selecting the best locations for each of the economic activities considered in the activity. Students should present examples in support of their statements.


HAPPY VALLEY
Richberg
(Pop. = 1,000)
VALLEY RIVER
Mytown
(Pop. = 10,000)
N
U.S.
KEY
highway
local road
park
forest
hills
SCALE
0
1/2
1mile

Industropolis
(Pop. = 3,000)
Widget Super
Factory
VALLEY RIVER
Subville
(Pop. = 1,000)

55

2.9 Who Is to Blame?

GRADE LEVEL Secondary school

INTRODUCTION Students find out what some popular beliefs about the causes of inflation are. Before beginning this unit, students must be aware of the phenomenon of inflation and know that it has been a major problem in the United States.

This inquiry activity can serve as part of an introduction to a more comprehensive study of inflation. Motivation for further study can result from increased student awareness of the discrepancies between hypotheses the general public holds regarding the causes of persistent inflation and economists' analysis of the problem.

This lesson will be useful in courses on government, economics, or problems of democracy.

ECONOMIC CONCEPT Inflation

OBJECTIVES Students will:

1 Hypothesize about possible causes of inflation that a sample of local residents might consider to be the most important;

2 Administer a survey, using a questionnaire of their own devising; tabulate the results; and test their hypotheses.

MATERIALS REQUIRED Questionnaire

PROCEDURES

1 Present the following conflicting explanations of the causes of inflation:

a "Labor unions keep demanding huge wage increases which force producers to raise the prices of their products. If wages were frozen, inflation would stop!"

b "Labor unions aren't to blame! Government is! The federal budget is never balanced, so the government borrows more and more money to cover its spending. Cut government spending and then things will be better!

c "I say it's greed on the part of big business. If businesses would stop raising their prices to increase profits, then labor wouldn't have to demand such big raises!"

d "The blame must be placed on the shoulders of the Federal Reserve System. They have increased the money supply too rapidly and we are paying the price!"

2 Ask students which position they support and encourage disagreement. Require students to explain their views.

3 Acknowledge that there are differing opinions about the causes of inflation. Ask students to state as many as they can. List the opinions on the chalkboard.

Factors suggested might include the following:

a Labor union demands for large wage increases.

b Government welfare spending

c Government military spending

d Business desires for larger profits

e Oil price increases by the Organization of Petroleum Exporting Countries (OPEC)

f Too much money chasing too few goods

g Consumers' "buy now-pay later" (credit) buying

5 Poll the class to determine which views students perceive as the major ones. These results will serve as hypotheses about the views of the local public.

6 With student help construct a questionnaire, such as the following, that can be administered to several other people:

INFLATION QUESTIONNAIRE

DIRECTIONS: Check which of the following factors you believe are major causes of today's rising prices, which are minor causes, and which are not causes at all. If you do not have any opinion, say you don't know.

Cause	Major	Minor	Not a Cause	Don't Know
1. Labor union demands for large wage increases				
2.				
3.				
⋮				
N. Other				

SOURCE: Created by Ronald Van Sickle for this project.

If students are capable and time is available, have them record respondent's personal characteristics. Gender, age, and occupational information might be associated with differences in patterns of belief.

7 After students collect data according to a specified procedure, summarize the figures on the chalkboard or display them using an overhead projector. Have students test their hypothetical outcomes with those of the sample. Published national opinion surveys could be useful also. Students should try to account for differences between their hypotheses and the survey findings.

8 In concluding this lesson, emphasize that the summary data represent personal opinions or beliefs about the causes of inflation. Some of the opinions may be correct; others may not be. Ask students how they might test some of the opinions as hypotheses. Lead the class in a "brainstorming activity" designed to determine all the possible sources for testing the validity of these opinions:

a Textbooks (authorities)

b Teachers (authorities)

c News magazines and editorials—professional opinions and data summaries

d Historical accounts of other inflationary periods—perspective of professionals

e Other

9 Assign groups of students to each "cause" listed in the questionnaire. Ask them to consult the sources and correct or modify the opinions ranked in the survey.

10 Review the reports in class; ask whether the information obtained was sufficient to validate or contradict the hypotheses (opinions) the group was testing. Ask students to explain their judgment of each report and its conclusion.

2.10 Making More with Less

GRADE LEVEL Secondary

INTRODUCTION The emphasis of this lesson is on the postwar performance of productivity growth rates in the United States. Productivity is measured by the ratio of outputs (production of goods and services) to inputs (the resources used to produce goods and services). (The amounts of both the outputs and inputs are measured in physical units or else in dollars adjusted for inflation.) For example, an automobile engine's efficiency, that is, its productivity, in using fuel is measured by the number of miles it gets per gallon of gasoline, that is, its output per unit of input.

The most frequently cited measure of the economy's total productivity is the ratio between total annual real output of goods and services (gross national product in deflated dollars) and hours of paid labor input. In recent years, the growth of this measure, output per hour of labor input, has slowed. The annual average rate of increase of the ratio was 3.2 percent from 1948 to 1966, 2.3 percent from 1966 to 1973, and only 0.7 percent from 1973 to 1981.

More output per unit of input (rising productivity) results in increases in the general standard of living. However, changes in productivity depend not only on changes in the quality and quantity of labor, but also on changes in the organization of the workplace, the quality and quantity of physical capital, and the quality and quantity of natural resources. When such changes are not for the better, productivity may decrease.

This lesson can be used in history, economics, and government classes. Before beginning the lesson, students should know what GNP and the other terms used above mean and should be able to define them.

ECONOMIC CONCEPT Productivity

OBJECTIVES Students will:

1 Develop hypotheses to explain why U.S. productivity increased more slowly in the 1970s than in the 1950s and 1960s;

2 Test the validity of their hypotheses and draw tentative conclusions based on available data.

MATERIALS REQUIRED Handouts 2.10A–2.10D

PROCEDURES

1 Present the general problem as described in the introduction. Ask: "What has happened? Why were increases in productivity in the United States smaller in the 1970s than in earlier decades?" Form small groups and ask them to frame hypotheses.

2 Reassemble the class and list the hypotheses on the chalkboard. Among them will probably be the following:

a People don't work as hard as in the past.

b People don't know how to work as well as in the past.

c Obsolescent machines and production techniques have not been replaced quickly enough to keep productivity rising at a high rate.

d New types of government regulation have made it harder to increase productivity at former rates.

e Unions have forced workers' wages up without the increases in productivity to pay for it. (NOTE: Students may present this hypothesis, but it is not pertinent to the issue. It explains changes in costs rather than changes in productive efficiency.)

f An increase in the proportion of young, unskilled, and inexperienced workers has diluted the quality of the labor force and, hence, productivity.

3 Taking each hypothesis in turn, ask whether it is revelant to the issue and what kinds of evidence would be needed to assess its validity. (As a result of the discussion, the class may decide to exclude some hypotheses immediately because they are irrelevant to the issue or inherently difficult or impossible to test empirically.)

SOURCE: Written for this project by Ronald Van Sickle

4 Distribute the handouts and resolve any problems of interpretation, e.g., how to read the graph. Reassemble the groups and have them test the hypotheses. Each group is to prepare a report stating which hypotheses were supported, which were not supported, and which could not be tested with the available data. The report should also indicate the degree of confidence of the group in the findings.

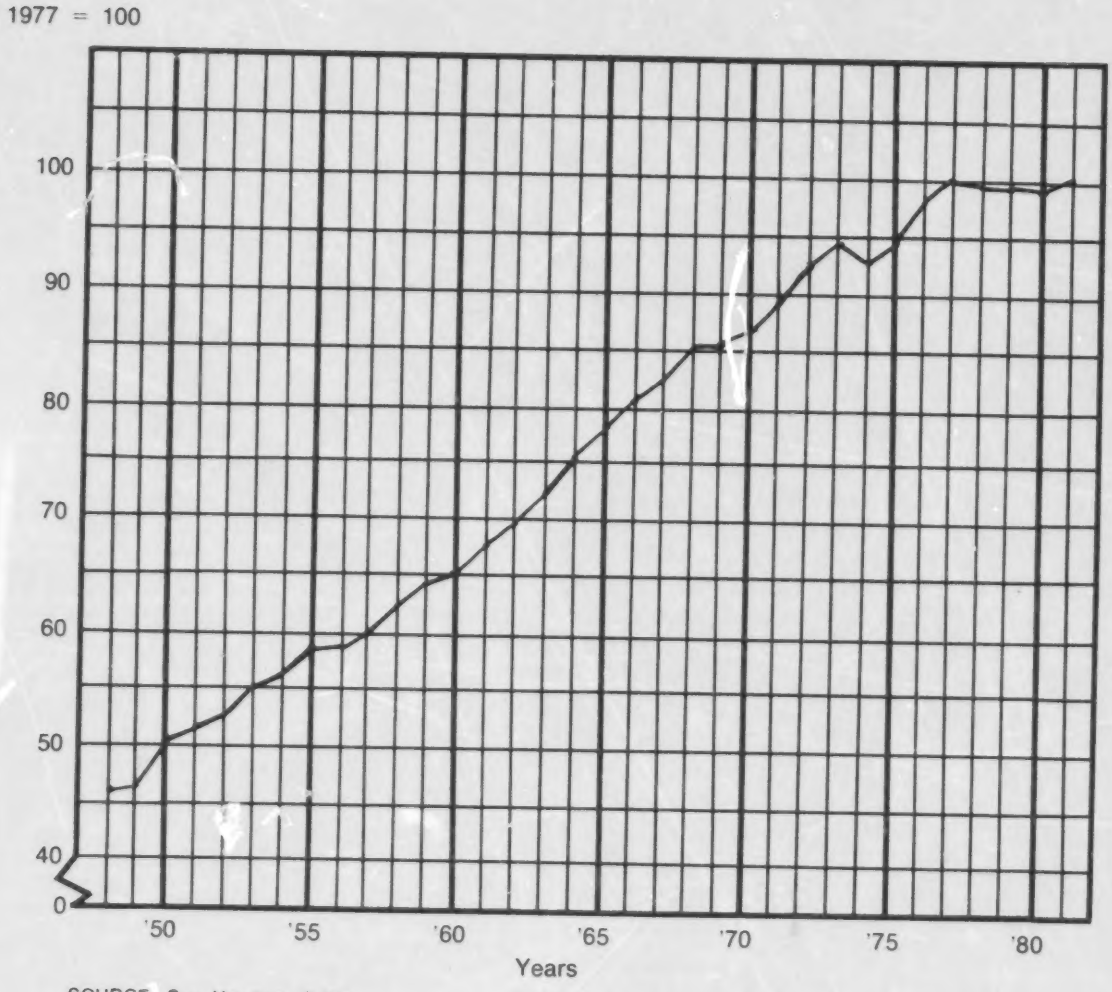
5 Reassemble the class and hear the group reports. Be certain the reports cite evidence for their conclusions and present evaluations of the adequacy of the data. Ask if the data prompted students to propose additional hypotheses.

6 This data analysis and hypothesis testing procedure will not result in a comprehensive, conclusive explanation of the productivity slowdown. (Professional economists have as yet—early 1982—not managed to do so.) Some hypotheses will be untestable or only partially testable with the data available. The conclusions of any empirical inquiry are tentative and that will be obvious in this case. Additional research and hypothesis testing would be appropriate to explore the problem further.

Handout 2.10A

OUTPUT PER HOUR OF LABOR INPUT

(total private business sector)



SOURCE: See Handout 2.10D

Handout 2.10B

Civilian Labor Force Participation Rates, by Age and Gender, 1947–80
(percent)

	Total	Age (years) 16–17	18–19	20–24	25–34	35–44	45–54	55–64	65+
MALE									
1950	86.4	51.3	75.9	87.9	96.0	97.6	95.8	86.9	45.8
1955	85.3	48.1	72.2	86.8	97.6	98.1	96.5	87.9	39.6
1960	83.3	46.0	69.3	88.1	97.5	97.7	95.7	86.8	33.1
1965	80.7	43.9	65.9	85.8	97.3	97.3	95.6	84.6	27.9
1970	79.7	47.0	66.7	83.3	96.4	96.9	94.2	83.0	26.8
1975	77.9	48.6	70.7	84.6	95.3	95.7	92.1	75.8	21.7
1980	77.4	50.1	71.5	86.0	95.3	95.5	91.2	72.3	19.1
FEMALE									
1950	33.9	30.1	51.3	46.0	34.0	39.1	37.9	27.0	9.7
1955	35.7	28.9	50.9	45.9	34.9	41.6	43.8	32.5	10.6
1960	37.7	29.1	50.9	46.1	36.0	43.4	49.8	37.2	10.8
1965	39.3	27.7	49.3	49.9	38.5	46.1	50.9	41.1	10.0
1970	43.3	34.9	53.6	57.7	45.0	51.1	54.4	43.0	9.7
1975	46.3	40.2	58.1	64.1	54.6	55.8	54.6	41.0	8.3
1980	51.6	43.8	62.1	69.0	65.4	65.5	59.9	41.5	8.1

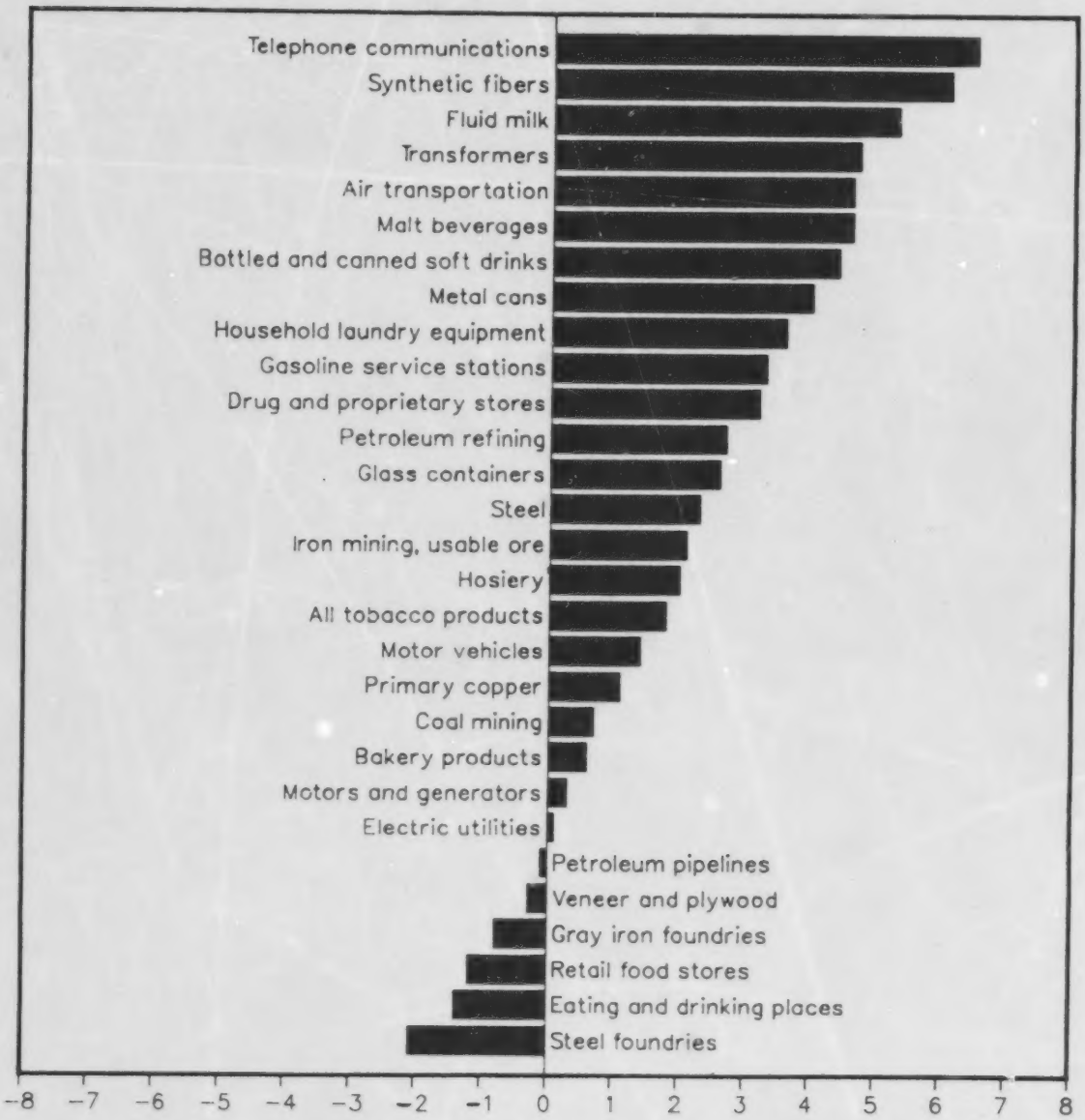
New Plant and Equipment Expenditures in Manufacturing
(billions of 1972 dollars)

	Total	Equipment	Plant		Total	Equipment	Plant
1947	19.42	12.69	6.73	1965	33.19	22.43	10.76
1948	13.66	12.48	6.18	1966	39.82	26.73	13.09
1949	14.07	9.38	4.69	1967	39.75	27.01	12.74
				1968	38.14	25.89	12.25
1950	14.34	9.75	4.60	1969	40.99	27.78	13.21
1951	18.93	12.34	6.60				
1952	20.37	13.23	7.14	1970	40.00	26.67	13.33
1953	20.48	13.78	6.70	1971	34.77	23.73	11.04
1954	19.67	13.29	6.38	1972	35.28	25.17	10.11
				1973	40.69	29.58	11.11
1955	19.90	13.23	6.66	1974	45.80	33.51	12.29
1956	24.54	16.45	8.08				
1957	24.92	16.39	8.52	1975	41.21	29.80	11.40
1958	18.35	11.62	6.43	1976	42.34	29.86	12.48
1959	18.63	12.58	6.05	1977	46.09	33.17	12.91
				1978	48.59	34.75	13.85
1960	22.19	14.72	7.47	1979	55.26	40.28	14.98
1961	21.10	13.66	7.44				
1962	21.50	14.17	7.33	1980	60.10	44.76	15.34
1963	22.98	15.54	7.44				
1964	27.98	19.03	8.95				

SOURCE: Labor force participation rates: *Handbook of Labor Statistics*, U. S. Bureau of Labor Statistics Bulletin 2070, pp. 13–14 and *Statistical Abstract of the United States*, 1981; new plant and equipment expenditures: *Survey of Current Business*, September 1981, pp. 34–35, 38–39.

Handout 2.10C

Growth in Output per Employee Hour in Selected Industries, 1975–80
(average annual percent change)



SOURCE: *Productivity Measures for Selected Industries, 1954–80*, U.S. Bureau of Labor Statistics Bulletin 2128 (1982), p. 3.

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Handout 2.10D

Productivity and Changes in Productivity and Related Data, 1947–81
(1977 = 100)

Year	Output		Hours of all persons		Output per hour of all persons		Compensation per hour		Unit labor cost		Implicit price deflator	
	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector	Private business sector	Nonfarm business sector
1947	35.1	34.0	80.4	68.3	43.6	49.8	17.0	18.5	38.9	37.1	38.2	36.6
1948	37.2	36.1	80.9	69.4	46.0	51.9	18.4	20.0	40.0	38.6	40.8	39.1
1949	36.5	35.4	78.3	66.8	46.7	53.0	18.7	20.6	40.1	38.9	40.4	39.5
1950	39.9	38.7	79.2	68.8	50.3	56.2	20.0	21.8	39.8	38.8	41.0	40.2
1951	42.2	41.2	81.5	72.0	51.7	57.2	22.0	23.7	42.5	41.5	44.1	42.8
1952	43.6	42.6	81.6	72.8	53.4	58.5	23.4	25.0	43.8	42.8	44.6	43.6
1953	45.4	44.4	82.4	74.6	55.1	59.5	24.9	26.4	45.2	44.5	45.0	44.4
1954	44.6	43.5	79.7	72.1	56.0	60.3	25.7	27.3	45.9	45.2	45.4	45.0
1955	48.2	47.1	82.7	75.1	58.2	62.7	26.3	28.3	45.2	45.1	46.1	46.0
1956	49.4	48.4	84.0	77.0	58.8	62.8	28.1	29.9	47.7	47.7	47.6	47.6
1957	49.9	49.0	82.7	76.6	60.3	63.9	29.9	31.7	49.6	49.5	49.3	49.3
1958	49.1	48.0	79.0	73.4	62.2	65.5	31.2	32.9	50.2	50.2	49.9	49.8
1959	52.7	51.9	82.1	76.6	64.2	67.6	32.5	34.2	50.7	50.5	50.9	50.9
1960	53.6	52.6	82.3	77.1	65.1	68.2	33.9	35.6	52.1	52.3	51.7	51.7
1961	54.5	53.6	81.0	76.3	67.2	70.2	35.2	36.8	52.3	52.4	51.9	52.0
1962	57.5	56.7	82.3	78.0	69.8	72.7	36.8	38.3	52.7	52.6	52.7	52.7
1963	60.0	59.2	82.8	78.9	72.4	75.0	38.1	39.6	52.7	52.8	53.3	53.4
1964	63.6	62.9	84.2	80.7	75.5	78.0	40.1	41.4	53.1	53.1	53.8	54.0
1965	67.9	67.3	86.8	83.7	78.2	80.4	41.7	42.8	53.3	53.2	54.8	54.9
1966	71.6	71.3	88.9	86.5	80.6	82.4	44.[illegible]	45.4	55.3	55.1	56.5	56.4
1967	73.2	72.8	88.8	86.7	82.4	83.9	47.0	47.8	57.0	57.0	58.0	58.2
1968	76.9	76.7	90.3	88.5	85.2	86.7	50.6	51.4	59.5	59.3	60.3	60.5
1969	79.2	78.9	92.7	91.3	85.4	86.4	54.2	54.8	63.5	63.4	63.3	63.4
1970	78.5	78.1	91.2	90.0	86.1	86.7	58.2	58.6	67.6	67.6	66.2	66.4
1971	80.9	80.4	90.7	89.7	89.2	89.6	62.0	62.5	69.5	69.7	69.1	69.4
1972	86.2	85.9	93.4	92.5	92.4	93.0	66.0	66.6	71.5	71.7	71.5	71.4
1973	92.0	91.9	97.0	96.4	94.8	95.3	71.3	71.7	75.2	75.2	75.3	74.1
1974	90.2	90.1	97.4	96.8	92.7	93.1	78.0	78.4	84.2	84.3	82.4	81.6
1975	88.5	88.1	93.4	92.7	94.8	95.0	85.5	86.0	90.2	90.5	90.4	89.9
1976	94.1	94.0	96.1	95.9	97.9	98.1	92.9	93.0	94.8	94.8	94.7	94.5
1977	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1978	104.7	104.9	104.9	105.1	99.8	99.8	108.4	108.5	108.6	108.7	107.4	107.0
1979	107.7	107.7	108.2	108.7	99.5	99.1	119.3	119.0	119.9	120.0	116.9	116.2
1980	106.8	106.8	107.5	108.1	99.3	98.8	131.5	130.8	132.4	132.4	127.6	127.4
1981[r]	108.9	108.7	108.5	109.1	100.4	99.7	144.6	143.9	144.1	144.4	139.3	139.6

Percent Change from Preceding Period

1948	6.1	6.0	0.7	1.6	5.3	4.3	8.5	8.6	3.0	4.1	7.0	6.8
1949	−1.9	−1.9	−3.3	−3.8	1.5	2.0	1.6	2.9	1	.9	−1.0	.9
1950	9.1	9.4	1.1	3.1	7.9	6.0	7.1	5.8	−.8	−.2	1.6	1.7
1951	5.8	6.5	2.9	4.6	2.8	1.7	9.8	8.8	6.9	6.9	7.4	6.6
1952	3.3	3.4	1	1.0	3.2	2.3	6.4	5.5	3.0	3.1	1.1	1.8
1953	4.3	4.2	1.0	2.5	3.2	1.7	6.4	5.6	3.1	3.9	.9	2.0
1954	−1.8	−2.0	−3.3	−3.4	1.6	1.4	3.2	3.2	1.6	1.7	1.0	1.4
1955	7.9	8.2	3.8	4.1	4.0	3.9	2.5	3.6	−1.4	−.3	1.6	2.2
1956	2.6	2.8	1.5	2.5	1.0	.3	6.5	6.0	5.5	5.7	3.3	3.5
1957	1.0	1.2	−1.5	−.5	2.5	1.7	6.5	5.7	3.9	3.9	3.5	3.6
1958	−1.6	−1.9	−4.5	−4.2	3.1	2.4	4.4	3.8	1.3	1.4	1.3	.9
1959	7.3	7.9	3.9	4.4	3.2	3.4	4.3	4.0	1.0	.6	2.0	2.3
1960	1.6	1.5	.2	.6	1.5	.8	4.2	4.3	2.7	3.5	1.4	1.5
1961	1.7	1.8	−1.5	−1.1	3.3	2.9	3.8	3.2	.5	.3	.6	.6
1962	5.5	5.8	1.6	2.2	3.8	3.6	4.6	4.0	.7	.4	1.5	1.5
1963	4.3	4.4	.6	1.1	3.7	3.2	3.7	3.5	0	.2	1.1	1.2
1964	6.0	6.4	1.6	2.4	4.3	3.9	5.2	4.5	.8	.6	1.0	1.2
1965	6.8	6.9	3.2	3.7	3.5	3.1	3.9	3.4	.3	.3	1.9	1.6
1966	5.5	5.9	2.3	3.4	3.1	2.5	7.0	6.0	3.8	3.5	3.0	2.8
1967	2.2	2.1	0	.3	2.2	1.9	5.3	5.5	3.0	3.5	2.7	3.2
1968	5.1	5.3	1.7	2.0	3.3	3.3	7.8	7.5	4.4	4.1	4.0	4.0
1969	2.9	2.9	2.6	3.2	2	−.3	7.0	6.5	6.7	6.8	4.9	4.7
1970	−.8	−1.0	−1.7	−1.4	.9	.3	7.4	7.0	6.4	6.6	4.5	4.8
1971	3.0	2.9	−.5	−.4	3.6	3.3	6.6	6.6	2.9	3.1	4.4	4.5
1972	6.6	6.9	3.0	3.1	3.5	3.7	6.5	6.7	2.9	2.8	3.4	3.0
1973	6.6	6.9	3.9	4.2	2.7	2.5	8.0	7.6	5.2	4.9	5.4	3.7
1974	−1.9	−1.9	.4	.4	−2.3	−2.4	9.4	9.4	11.9	12.1	9.4	10.1
1975	−1.9	−2.2	−4.1	−4.2	2.3	2.1	9.6	9.6	7.2	7.4	9.7	10.3
1976	6.3	6.7	2.9	3.4	3.3	3.2	8.6	8.1	5.1	4.7	4.7	5.1
1977	6.3	6.4	4.0	4.3	2.1	2.0	7.7	7.6	5.5	5.5	5.6	5.8
1978	4.7	4.9	4.9	5.1	−.2	−.2	8.4	8.5	8.6	8.7	7.4	7.0
1979	2.8	2.7	3.1	3.4	−.3	−.7	10.1	9.7	10.4	10.4	8.8	8.6
1980	−.8	−.9	−.6	−.6	−.2	−.3	10.2	9.9	10.4	10.3	9.2	9.7
1981[r]	1.9	1.8	.9	.9	1.0	.9	10.0	10.1	8.9	9.1	9.2	9.5

SOURCE: *Economic Report of the President, 1982* (U.S. Government Printing Office, Washington, D.C., 1982), pp. 278 and 279.

2.11 Where Are the Workers?

GRADE LEVEL Secondary

ECONOMIC CONCEPTS Comparative economic development

INTRODUCTION Students use time series data on the sectoral distribution and productivity of labor in three countries, each at a different stage of industrialization, as a basis for forming hypotheses about the relationship between economic development and the distribution of labor by economic sector. Students should understand and be able to define the terms used in the charts before beginning the activity.[1]

OBJECTIVES Students will:

1 Analyze and interpret bar graphs showing the distribution of workers by economic sector and the sectoral shares of national product in three countries;

2 Compare and contrast the sectoral distribution of labor in three countries, each of which is at a different stage of economic development;

3 Form hypotheses to account for the differences in the economies of the three countries;

4 Form hypotheses to account for changes in each economic system;

5 Develop and test generalizations about the factors that influence the sectoral division of labor and production.

MATERIALS Bar graphs A, B, and C representing the economic structures of three countries.

PROCEDURES

1 Be certain students understand and can define the terms in the charts, such as "total labor force" and "gross domestic product,"[2] and can explain what each sector refers to.

2 Ask students to take a few moments to analyze Country A's economy in 1951. Then ask the following questions (allow time for discussion of answers):

a What share of domestic product did agriculture contribute? Manufacturing? Services?

b What share of the work force is engaged in farming? Factory work? Services?

c Which group of workers represents the largest percent of the labor force? Which the smallest percent? Why might this be so?

d How would you characterize or describe Country A's economy? Is it industrially advanced or based mainly on farming? Rich or poor? What would it be like to live there? Explain your answer.

3 Repeat the questions above for the 1980 data. Add the following questions:

a How much or how little has Country A's economy changed over the years? Explain.

b In what direction is Country A's economy moving—toward or away from an agricultural lifestyle? Toward or away from an industrial lifestyle? How can you tell?

4 Give students a few minutes to look at the data for Country B. Pose the questions asked in steps 2 and 3. Ask students to form small groups, compare A and B, and answer these questions:

a Which of the two countries is technologically more developed? How can you tell? Give criteria.

1 *World Studies (Secondary)*, pp. 45–79, another Joint Council publication in the MCG series (1980), contains a careful presentation of the facts and issues of economic development as well as appropriate lessons.

2 Gross domestic product (GDP) is a measure of the market value of goods and services produced by labor and property located in an economy over a given period, usually a year. It equals gross national product (GNP) less the net inflow of labor and property incomes from abroad.

SOURCE: Created for this project by Jack Zevin.

b Which of the two countries is developing more rapidly? How can you tell? Cite data and criteria for your answers.

5 Give students a few minutes to study the data about Country C. Again ask them to form small groups and to compare all three countries' economies. Ask:

a Which of the three countries probably advanced the most in industrial development between 1951 and 1980?

b Which advanced the least?

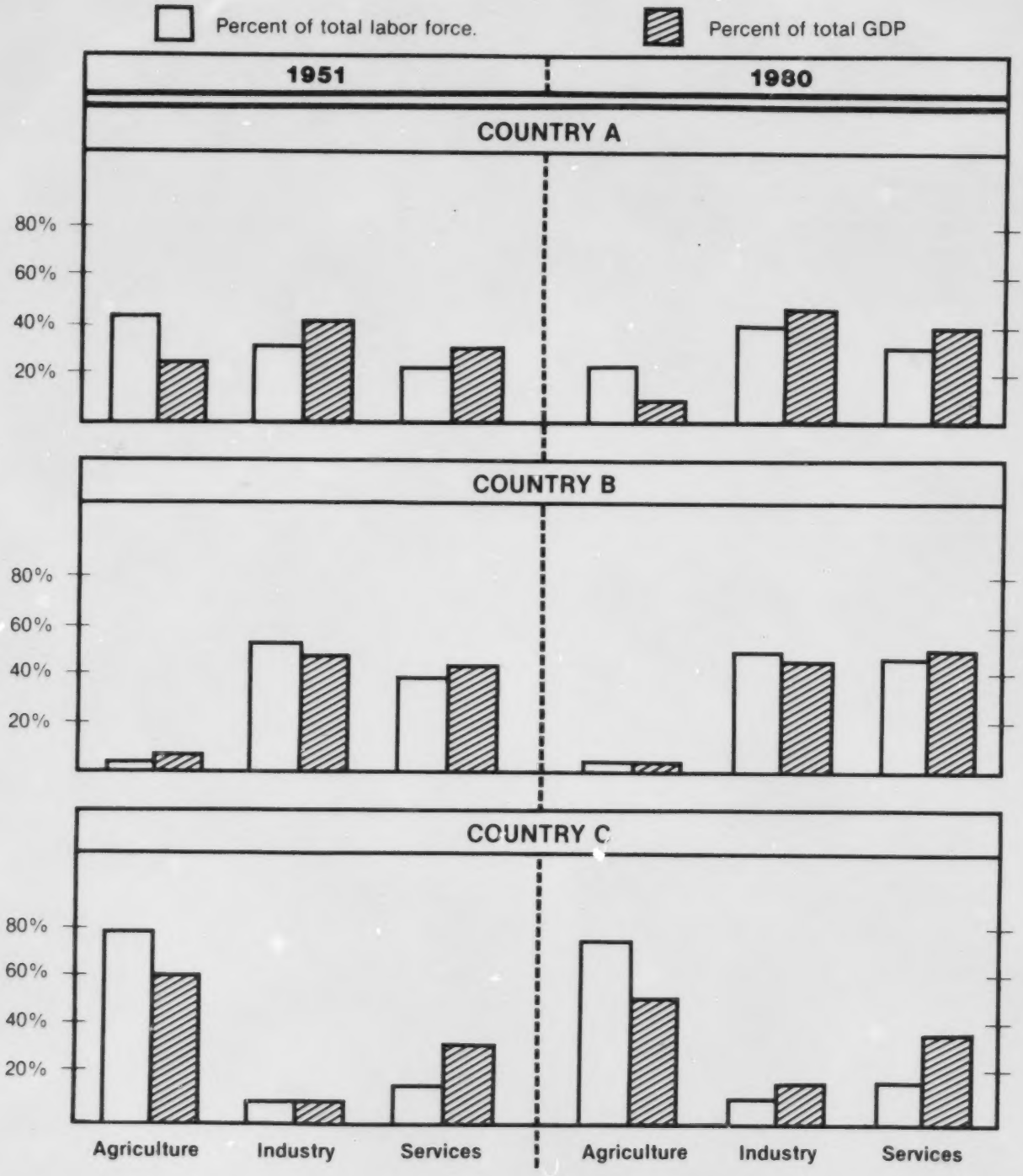
c How can you tell the difference between economies? Which measures probably yield the strongest clues to industrial level: distribution of labor by sector, product per capita, gross domestic product, or distribution of workers?

d Which countries in the world probably correspond most closely to the types of systems exhibited by A, B, and C? Explain your answers.

6 OPTIONAL: Select or have students select three countries that seem to exemplify the three stages of economic development described earlier in the lesson. Form class into three teams and have each team study one of the countries, using such sources as the World Bank's annual *World Development Report* or the United Nations *Statistical Yearbook*, encyclopedias, books and articles on industrial development, and anthropological studies of developed, developing, and underdeveloped areas. Set aside several class sessions for the team reports and for evaluation of the previous conclusions in light of the new data regarding the three stages of economic development.

Handout 2-11A

Labor Force and Output by Economic Sector



3 SKILLS LEARNING

Skill is the ability to do something well. Mastering skills is especially important because they are the means by which people can continue learning after the completion of formal schooling. Without skills, independent learning cannot take place; instead, students must rely on the integrity of authorities for answers. Because poorly developed skills, such as those related to reading and map work, are often the underlying source of learning difficulties in the social studies, the importance of a well-planned skills program in the social studies curriculum is widely accepted.

The model lessons in this section stress development of competence in research and in critical thinking.[1] We used these two categories in order to place primary emphasis on the cognitive operations students perform in skills learning.

The units on research skills learning give students practice in obtaining information about selected topics and presenting data in intelligible forms. The following are examples of research skills:

1 Choosing appropriate books for a specified purpose;

2 Distinguishing between important and unimportant details;

3 Classifying information under main headings;

4 Reading a chart to obtain information.

Critical thinking skills include analyzing, synthesizing, and evaluating information. These skills enable students to use social studies data to solve problems and make choices. The following are examples of critical thinking skills:

1 Perceiving relationships among ideas and events;

2 Classifying points of view;

3 Determining the accuracy of a conclusion on the basis of given evidence;

4 Inferring relationships from evidence, e.g., deducing types of economic activity by use of a map that shows the location of productive resources.

The combination of research and critical thinking skills makes inquiry and problem solving possible. Thus, maps, tables, and charts, which students prepare after compiling and organizing data, become more meaningful when used analytically to evaluate human behavior.

All skills are (1) developmental and (2) require systematic practice if they are to be learned. Teachers should use the following guidelines, which take account of these two aspects, in planning skills lessons:[2]

1 The skill should be taught functionally, i.e., in the context of a topic of study, rather than as a separate exercise.

2 Students must understand the meaning and purpose of the skills and have a motivation for developing them.

3 Students should be carefully supervised in their first attempts to apply the skills, so that they will form correct habits from the beginning.

4 Students need repeated opportunities to practice the skill, with immediate evaluation so that they know in what respects they succeeded or failed in their performance.

5 Since not all members of a group learn at the same rate or remember what they learned equally well, there should be provision for diagnostic measures to assess the need for individual help, and appropriate follow-up exercises should be given.

6 Skill instruction should proceed from the simple to the more complex; the resulting growth in competence should be cumulative as students move through school, with each level of instruction building on and reinforcing what has been taught previously.

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1 Pearl M. Oliner, *Teaching Elementary Social Studies: A Rational and Humanistic Approach* (New York: Harcourt Brace Jovanovich, 1976), p. 182.

2 The first eight are paraphrased from *Skill Development in Social Studies*, edited by Helen McCracken Carpenter (Thirty-third Yearbook of the National Council for the Social Studies, Washington, D.C., 1963), pp. 311–312. We added the ninth.

Margit McGuire and Elmer Williams selected the lessons for skills learning and wrote this overview.

7 Students should be helped at each stage to learn to apply the skill in a variety of situations so as to achieve maximum transfer of learning.

8 The program of instruction should be sufficiently flexible to allow skills to be taught as students need them; many skills should be developed concurrently.

9 The teacher should arrange a demonstration of the correct use of each skill when it is first introduced to the class.

To illustrate how skills in research and critical thinking can be taught, the model lessons utilize a variety of data sources—mainly on economics—commonly employed in social studies. Learning and practicing the specific skills on which the lessons center should promote a greater understanding of economics itself. Pursuing several objectives at once is appropriate because effective social studies instruction, while having a particular focus, usually has more than one purpose. Ideally, students derive knowledge from their encounter with the subject matter and learn skills as part of the study process.

3.1 Bookmark Factories

GRADE LEVEL Elementary

SKILL Research—collecting and organizing information

ECONOMIC CONCEPTS Division of labor; productivity

DATA SOURCE Simulation

INTRODUCTION Students use the skills of observing, interpreting, and organizing information to learn about methods of production. Most of the students participate in the construction of "happy face" bookmarks while the rest observe the workers.

The lesson can complement a unit on communities or cities, technology, industrialization, or the study of the economic activity of a particular geographic area.

OBJECTIVES Students will collect and organize information concerning methods of production by:

1 Naming and describing events observed or experienced during the simulation;

2 Tabulating the information obtained from the simulation.

MATERIALS Total supplies for a class of 25–30 students:

- 15 pairs of scissors
- 12 containers of glue
- 100 sheets of 8½" × 11" white paper with 2¾" × 8½" rectangles marked on them (see Procedure 1)
- 200 sheets of yellow paper with circle patterns on each sheet
- 13 black crayons
- 11 large manila envelopes
- 10 copies of Handout 3.1A, Questions for Observers

PROCEDURES

1 To prepare the rectangle pattern, fold a sheet of 8½" × 11" paper crosswise into four quarters. Flatten the sheet. Lay a straight edge along each fold in turn and draw broken lines across with a blunt pencil or felt-tipped pen. Use this sheet as a master to make the rectangle patterns. Students cut the rectangles apart along the broken lines.

2 Prepare the following packets of materials in advance:

a Put one set of the following materials in each of TEN of the large manila envelopes: 1 pair of scissors, 1 container of glue, 5 sheets of the rectangle pattern, 10 sheets of the circle pattern, 1 black crayon.

b Put all the following materials in the remaining manila envelope: 5 pairs of scissors, 2 containers of glue, 50 sheets of the rectangle pattern, 100 of the circle pattern, 3 black crayons.

3 Copy production table (page 56) on chalkboard.

4 Tell students that some of them are going to be workers in their own factories, a second group will work together on an assembly line in a large factory, and a third group will be observer/quality control experts. Show students a completed bookmark (see Sample Bookmark).

5 Explain that students should carefully watch what is happening during the production process as they participate in this activity.

6 Divide the class into working groups and observers. Select ten students to work individually. Space them around the room at desks or small tables. Select another ten students to be assembly line workers and place them at a large table. Tell the remaining students (observers) they will be free to move around the room and observe what is happening.

7 Once students have taken their assigned places, distribute packets and demonstrate how to make a bookmark. Allow students time to ask questions, get organized, and practice making a bookmark. Collect practice bookmarks before the simulation begins.

Each solo worker must prepare one bookmark at a time. The assembly line workers need to decide which workers will be responsible for which tasks. NOTE: To facilitate this activity, help the assembly line workers to assign tasks on the basis of abilities of individual students.

SOURCE: Adapted from *The Book Company*, by Margit McGuire and Diane Reinke (Washington State Council on Economic Education, 1979), pp. 33–41. Used with permission of the Washington State Council on Economic Education.

8 Distribute Handout 3.1A to the observers (or cut the questions apart and give copies of just one or two questions to each observer). Explain to the observers that they are to watch the workers, using the questions on the handout to guide their observations.

9 Explain to the class that the observers will be watching the work and at the completion of the production period will be examining the bookmarks to be sure they are properly constructed. Caution the workers to prepare their bookmarks carefully.

10 Begin production. Allow students five to ten minutes to produce bookmarks.

11 Stop production and have the observers inspect the bookmarks and count the number of acceptable ones.

12 Record information on the production table.

a To give students practice in interpreting the data, ask the observers to report what they saw, using the questions in the handout as a guide.

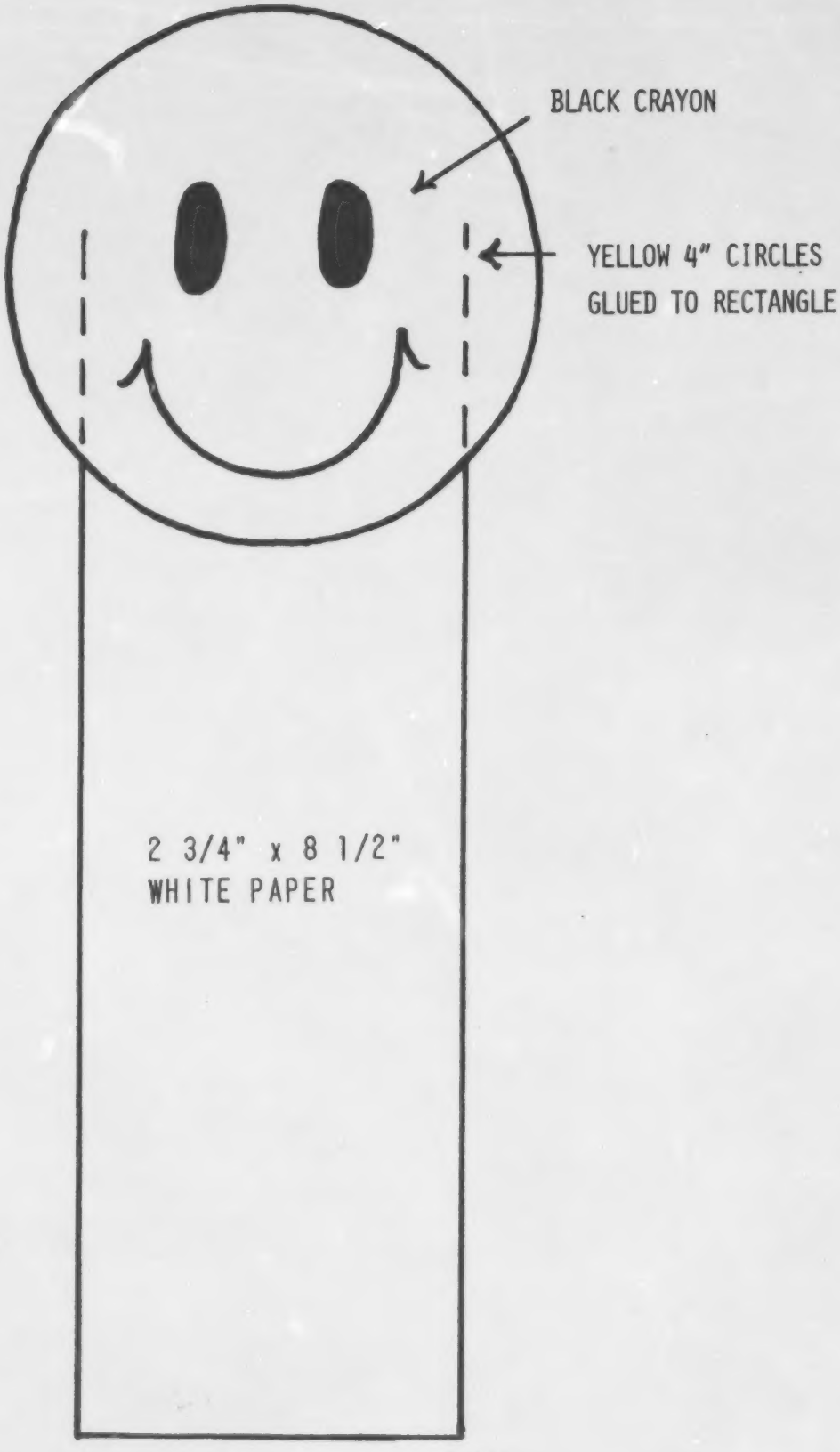
b Ask workers to report their observations about the experience. The teacher should ask additional questions to reinforce the research skill being taught in this lesson.

13 As the children describe what they did, the teacher should call their attention to the economic concepts and skills the activity exemplifies, such as division of labor, productivity, etc.

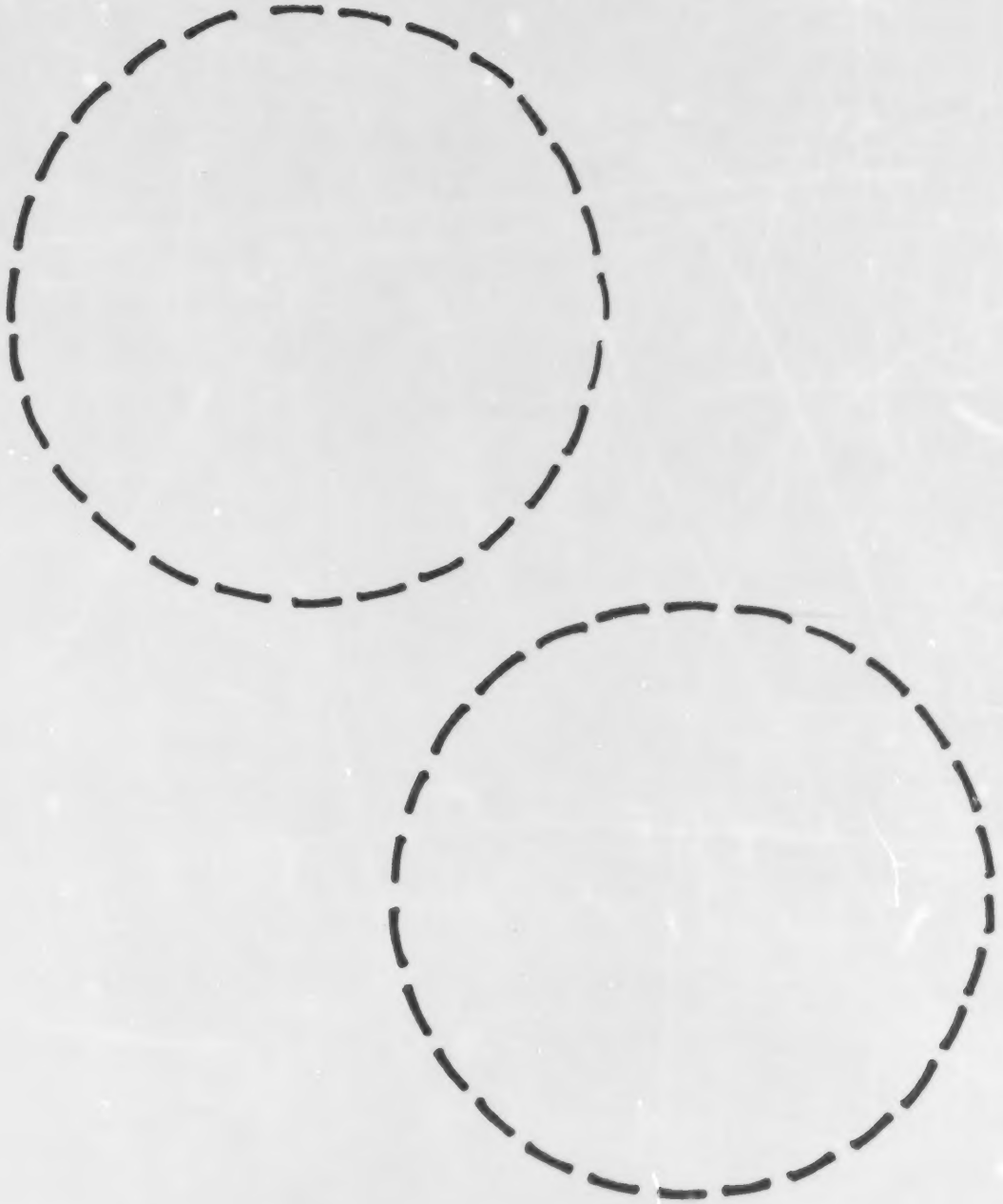
PRODUCTION TABLE

Production Unit	Number of Workers	Method of Working	Number of Completed Bookmarks	Bookmarks Produced per Worker

SAMPLE BOOKMARK



CIRCLE PATTERN



Handout 3.1A

QUESTIONS FOR OBSERVERS

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1 What advantages do the individual workers have over the assembly line workers? Explain your answer.

---

2 What advantages do the assembly line workers have over the individual workers? Explain your answer.

---

3 What problems did the assembly line workers run into?

---

4 What problems did the individual workers run into?

---

5 Which group of workers produced the most bookmarks? Why?

---

6 Why was it important for the assembly line workers to cooperate?

---

7 What skills were you using to learn about division of labor and productivity?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.2 What Do You Choose?

GRADE LEVEL Elementary—particularly suitable for grades 1 and 2

SKILL Research—organizing and interpreting information

ECONOMIC CONCEPT Choice-making

DATA SOURCE Charts

INTRODUCTION Since people's incomes are limited, they must make choices about what to buy. Their tastes and the prices of the goods they want to buy will affect their decisions. This lesson stresses the effect of tastes on choice-making; students do not have to consider income or price constraints, since they will not have to purchase the goods. With the help of the teacher, students construct a simple chart to aid them in forming generalizations about how tastes influence their preferences (choices). The lesson can be used to study differences in individual tastes or family wants.

OBJECTIVES Students will organize and interpret information they need to make choices by:

1 Indicating their first choice from a list of similar goods (e.g., ice cream flavors, TV programs, pets, toys, etc.);

2 Developing a chart showing their first choices;

3 Generalizing from the data in the chart about how tastes influence choices.

MATERIALS

1 Two colors of construction paper cut into roughly one-inch squares;

2 Charts titled "My Favorite Toy," ". . . Dessert," etc., with six-inch lengths of masking tape stapled in position (sticky side out) and labeled as shown in the sample chart that appears with this lesson.

PROCEDURES

1 On the chalkboard, list the names of four or five similar goods. Read aloud each name on the list and verify that students know what the item named is. The teacher may wish to draw or attach pictures of the items next to the words.

2 Direct students to answer the following question silently: If you could have any of these things, which would be your first choice?

3 Distribute one paper square to each student. Display a partially prepared chart such as the one accompanying this lesson.

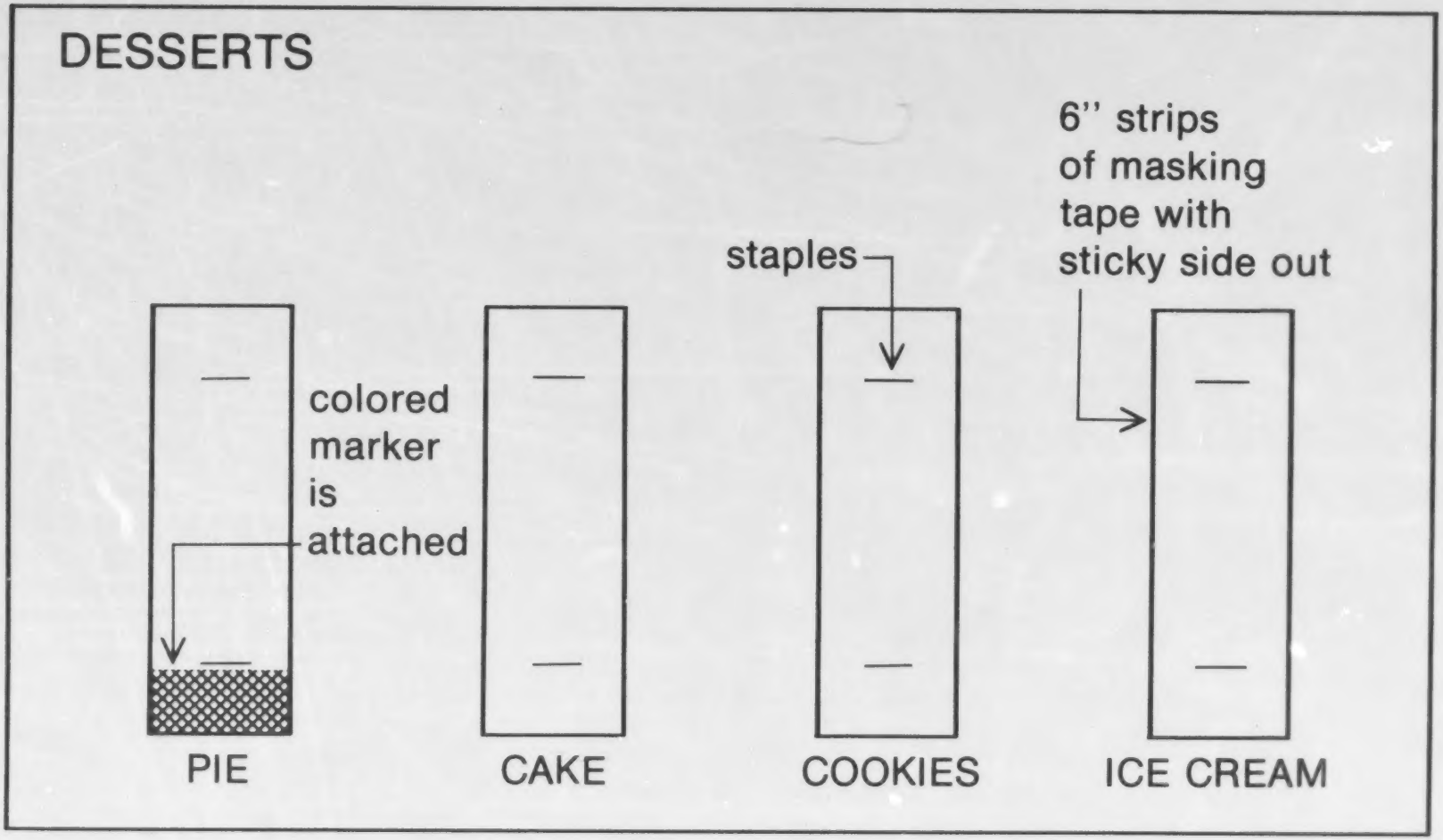
4 Show the class how to attach paper squares to the marking tape. Then have three or four students at a time go to the chart and place their markers on the columns that represent their first choices.

5 After all students have placed their markers on the chart, use questions such as the following to help students make some general statements based on the data in the chart:

- **a** What item did most of you choose?
- **b** Why did you choose that item?
- **c** What does the chart show us about our choices? (Students should show by their comments their understanding that their tastes determined their choices.)

6 *Follow-up:* If you think the students need more practice, repeat the exercise using a different category of goods. (You may wish to distribute squares of a different color for indicating choices in the second round.)

SOURCE: Adapted from *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Primary Level* (New York: Joint Council on Economic Education, 1978), p. 18. This activity is the basis for Lesson 2.4 as well. Teachers may wish to compare Lesson 2.4 with this one to see how an activity can be adapted to achieve various objectives.


DESSERTS
6" strips of masking tape with sticky side out
staples
colored marker is attached
PIE
CAKE
COOKIES
ICE CREAM

61

75

76

3.3 Finding Out About . . .

GRADE LEVEL Elementary

SKILL Research—locating information

ECONOMIC TOPIC Information costs

DATA SOURCES Books, newspapers, magazines, retail catalogs, radio, TV, personal contacts

INTRODUCTION Students learn how to locate information in a variety of sources. The teacher asks the class for help in obtaining price and quality information about roller skates to be bought as a birthday present for a young cousin. Students are then given a similar problem in which they must determine where to get product information.

Follow-up lessons might be a part of the study of goods and services needed or wanted by a family, community, region, or nation.

OBJECTIVE Students will determine what sources to use in locating information about a product by:

1 Making a list of potential sources of information about a given product;

2 Distinguishing between appropriate and inappropriate sources of product information.

MATERIALS Handout 3.3A (optional); examples of sources of information such as newspapers, magazines, catalogs, etc.

PROCEDURES

1 Explain to the class that you want to buy a pair of roller skates as a birthday present for your cousin. The problem is where to get the best skates for the lowest price.

2 Ask students to work in pairs to think of places where they could find information about roller skates. You may want to write the following question on the board: "Where can a person find information about the quality and price of roller skates?"

3 After giving students a few minutes to think of sources, ask them to state their suggestions to the whole class. Write all their ideas on the chalkboard. The list might look like this:

newspapers	catalogs
magazines	stores
friends	television/radio ads

You may want to show actual examples of the printed sources in order to make sure that all students understand the meaning of the words on the board.

4 Ask students to explain why these are good sources for obtaining information about roller skates.

5 To help students realize that it takes effort (time) to obtain information, ask:

a Where would you find information about roller skates in the least amount of time?

b In which sources might it take a lot of time to find information?

c Would you use all of these sources if you were in a hurry and had to buy the roller skates right away?

d If you had time to use only one of the sources, which would you use? Why?

6 To provide additional practice distribute copies of the worksheet (Handout 3.3A). Tell students to check the first column, "Will it help you?" if they think the source has information about a new pair of jeans. Have the students carry out this activity either individually or in groups according to the ability of the class. (NOTE: You may want to fill in the column for the first listed source to be sure students understand what they are to do.)

SOURCE: Created for this project by Margit McGuire.

7 *Follow-up:* Tell students to check the sources listed in the handout to see which ones provided useful information about jeans. For example, they should scan a newspaper to see if it contains jeans advertisements, ask friends to find out if they can provide useful information, etc. They should then fill in the second column. After they have checked out all the sources, they should complete the third column by checking the one source they thought had the most useful information. (You may wish to allow time for students to discuss their evaluations.) In conclusion, explain that buyers often do not have the time to find all the information they would like to have before making a purchase; sometimes there is only time to check one or two sources—preferably those regarded as "best"—before making a decision.

Handout 3.3A

FINDING OUT ABOUT . . .

Name _____ **Class** _____

You need to buy a new pair of jeans. Where could you find out about jeans?

	WILL IT HELP YOU?	DID IT HELP YOU?	BEST SOURCE?
NEWSPAPER			
RESTAURANT			
CLOTHING STORE			
FRIENDS			
BANK			
CATALOGS			
COMIC BOOK			

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.4 In the Market

GRADE LEVEL Elementary

SKILL Research—locating and interpreting information

ECONOMIC CONCEPT Markets, supply and demand

DATA SOURCE Pictures

INTRODUCTION Students practice observation, using pictures of markets. It is suggested that this skills lesson be taught when the students come to a picture of a market in their social studies text. Otherwise, they may use the pictures provided in this lesson.

The lesson can be used to introduce the study of market structure or exchange.

OBJECTIVE Students will engage in purposeful observation by finding examples of buyers, sellers, goods, and services in pictures depicting markets.

MATERIALS

1 Handouts 3.4A, 3.4B, 3.4C

2 A classroom set of social studies textbooks having pictures of markets or a classroom set of copies of magazines such as *National Geographic* or *Natural History* containing such pictures.

PROCEDURES

1 Tell students that a market is where buyers and sellers exchange goods and/or services. (Be prepared to explain any unfamiliar terms in the above definition.)

2 Call students' attention to the picture of a market in their textbook or distribute copies of one of the handouts. Explain that there are many things to observe in a market but that the students are to focus on the parts of the picture that show it is about a market.

3 Point out examples in the picture of buyers and sellers exchanging goods and/or services. Ask students to find additional examples in the picture. To involve all students in this activity ask them to point to buyers and sellers, then goods and services, while you walk around the room to check their responses. Repeat the procedure using copies of one of the other handouts or another picture in the textbook.

Ask students to locate other pictures of markets in the textbook or in *National Geographic* or similar magazines, and explain why those pictures are examples of markets. Remember that the major objective is for students to develop skill in observation.

4 To conclude the lesson, ask students to list the various buyers and sellers and goods and services they might find in their local shopping center (market) or (in a city school) major shopping area or street.

SOURCE: Created for this project by Margit McGuire.

Handout 3.4A

Edward Blackwell

Handout 3.4B

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Edward Blackwell

Handout 3.4C

Edward Blackwell

3.5 A Trip to a Factory

GRADE LEVEL Elementary

SKILL Research—locating information

ECONOMIC CONCEPT Productive resources (factors of production)

DATA SOURCE The environment—a field trip

INTRODUCTION Students practice their observational and listening skills by taking part in a trip to a manufacturing plant. To benefit from the activity, students should have had prior experience in using these skills.

This lesson can be integrated into elementary social studies units on manufacturing as it takes place in a variety of geographical settings.

OBJECTIVE Students will listen and observe in order to gain information about productive resources by:

1 Participating in a field trip to a factory;

2 Answering assigned questions;

3 Drawing and labeling pictures of three of the productive resources seen on the field trip.

MATERIALS Handout 3.5A

PROCEDURES

1 Plan the trip.

a Obtain permission from the school principal or other responsible school official.

b Contact the factory you wish to visit. Select a plant in which students can easily see and recognize the productive resources used in the manufacturing process. Be sure to provide the business with the following *written* information:

(1) Date and time of arrival

(2) Purpose of the visit

(3) Description of your class—grade level, number of students, number of adults, etc.

(4) Specific information that students are to learn—explain to contact person that students are to practice listening and observing by looking for and describing the productive resources used in the business

(5) Length of time of the visit

c Become acquainted with the facility by visiting it prior to the field trip.

d If the guide will be someone from the business, give the person a copy of Handout 3.5A.

e Arrange for transportation.

f Prepare and send permission slips home with students.

g Arrange for adults to accompany students on the trip. Tell the adults what their duties will be on the trip. (Plan a ratio of no more than eight children to one adult.)

h Plan to return to school in enough time to discuss what was learned on the trip.

i Call the business the morning of the field trip to remind them of your impending visit.

2 Prepare students for the field trip.

a Explain to students that they will be taking a trip to visit a business. Tell them what the business is called and what product it manufactures.

b Explain the purposes of the trip.

(1) To observe how people work together in producing a product

(2) To observe the productive resources used in the business

(3) To listen to the guide describe how productive resources are used in the business

c Define terms the students will hear used on the field trip:

(1) Productive resources

(2) Natural resources

(3) Human resources

(4) Capital goods resources

SOURCE: Adapted from *The Book Company*, by Margit McGuire and Diane Reinke (Washington State Council on Economic Education, 1979), Lesson 11. Used with permission of the Washington State Council on Economic Education.

d Discuss appropriate behavior for the field trip. Have students practice appropriate behavior (e.g., take the class for a walk around the school).

3 The trip

a Assign each adult to a specific group of students.

b Cut apart Handout 3.5A along the broken lines. Assign each group specific questions to report on when the class returns from the trip. Have the questions read aloud to be sure everyone in the group understands them. Students and adults should take their copies of the questions with them on the trip to refer to as needed.

c Allow time just before the trip to:

(1) Review the purposes of the trip and the questions each group is to answer

(2) Review appropriate behavior

d During the visit, help students practice their observational and listening skills by asking appropriate questions. If the presentation is too advanced, restate it in terms your students can understand. (Remember that guides often have had little experience talking to young children.)

4 Follow-up activities

a Ask each of the groups to meet and discuss its questions. Encourage the adults to stay and assist their groups in this activity. Select a reporter for each of the groups.

b Have groups answer their assigned questions. Have reporters give presentations to the entire class.

c Ask additional questions that will reinforce the skills being practiced.

d To provide closure, ask students to draw pictures of three productive resources seen at the factory. Ask them to label the productive resources (natural resources, human resources, capital goods resources) in their pictures.

e Have students write thank-you notes to the manufacturer. You may want to help students start their notes with the following sentence: "On the trip to (name of business) I learned . . . " You may also want to send some of the pictures drawn by the students.

Handout 3.5A

GROUP 1

1. What does this business do?
2. What skills did you use to help you decide what this business does?

GROUP 2

1. Name three capital goods that this factory uses.
2. How did you learn about these three goods on the trip?

GROUP 3

1. Name three natural resources that this factory uses.
2. What skills did you use to help you identify the natural resources?

GROUP 4

1. What skills do you think the employees need in order to do their jobs?
2. What skills did you use to help you answer question 1?

GROUP 5

1. How do you think the employees learned to do their jobs?
2. What jobs would take the longest to learn?

GROUP 6

1. Do you think the employees like their jobs?
2. What did you see or hear that would tell you whether or not the employees liked their jobs?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.6 What Does It Take?

GRADE LEVEL Elementary

SKILL Critical thinking—analyzing

ECONOMIC CONCEPT Productive resources; natural resources

DATA SOURCE Maps

INTRODUCTION The lesson can be used as an introduction to map-reading or to the geography of the United States. Students first use the map provided to develop lists of some of the major resources of various regions of the United States. They are then asked to analyze the list and make inferences about the economic activities carried on in the different regions. The activity requires the students to read a map as a means of gaining information about an area.

OBJECTIVE Students will analyze the major resources of regions of the United States and make inferences about the economic activities of each region by:

1 Reading a map to determine the natural resources of each region;

2 Listing possible economic activities in each region.

MATERIALS Classroom set of copies of Handout 3.6A (resource map of the United States)

PROCEDURES

1 Give a copy of the map to each student. Briefly review cardinal directions and have students point to the location of various regions, e.g., southeast, northwest, etc.

2 Define "natural resources" and provide examples.

3 Copy the table shown on this page on the chalkboard. Ask students to study the map and determine what natural resources are to be found in each of the regions. List the resources in the appropriate columns of the table.

Resources of the United States

Northwest	Southwest	Midwest	Northeast	Southeast

4 Divide the class into five groups and assign a region to each group.

5 Explain that each group is to draw up a list of possible economic activities for the region based on the resource information compiled earlier. The list of economic activities might include ways of making a living, industries, businesses, etc. To get students started, you may need to provide specific examples: iron ore suggests a steel mill; forest land suggests a paper mill, lumbering, etc.

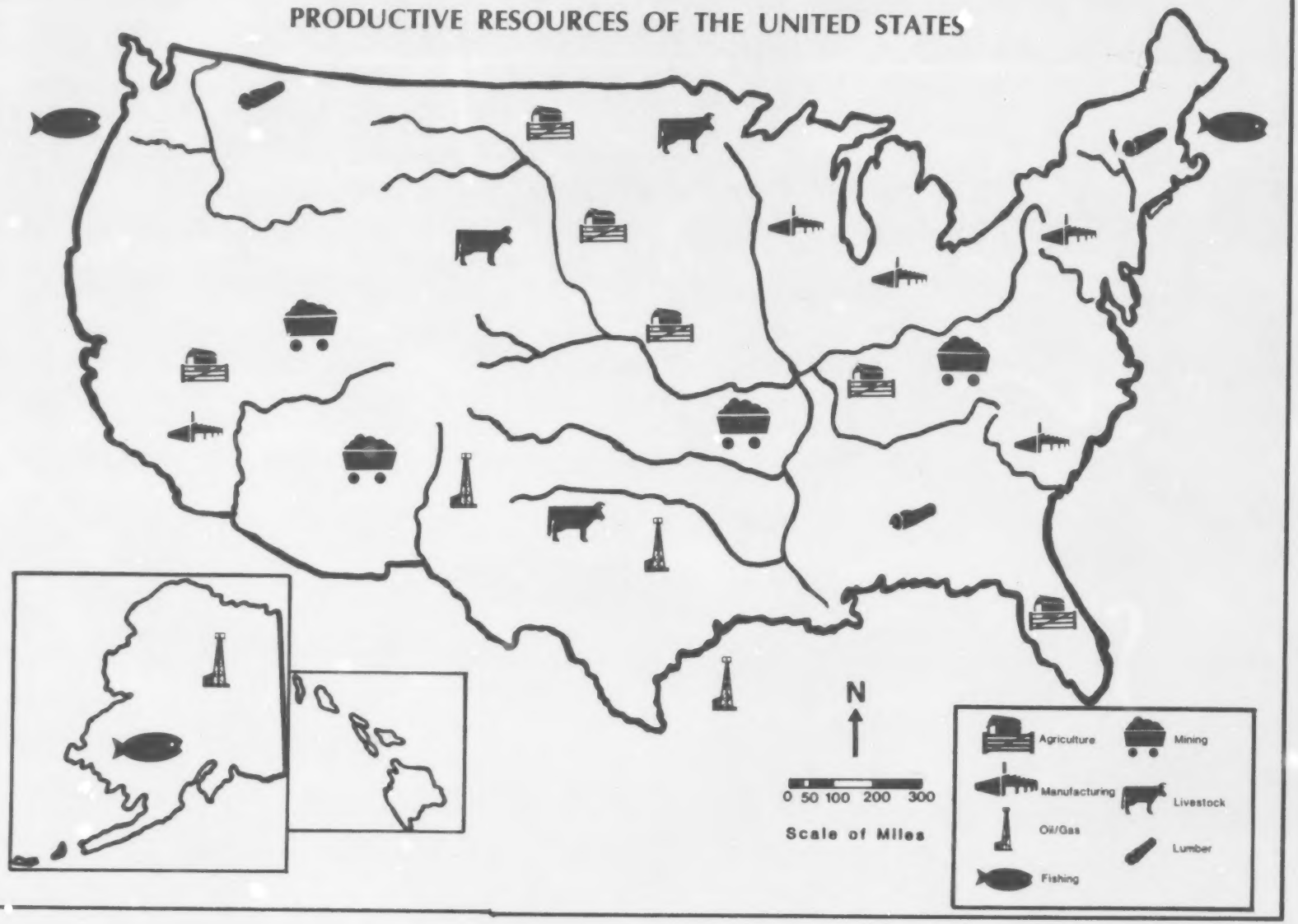
6 Once groups have completed their lists ask a member of each group in turn to share its list with the rest of the class and to explain why the group chose those economic activities.

7 For closure, ask students to make statements concerning the relationship between the resources found in a region and the economic activities undertaken there.

SOURCE: Created for this project by Margit McGuire.

Handout 3.6A

PRODUCTIVE RESOURCES OF THE UNITED STATES



3.7 The Duplicating Machine

GRADE LEVEL Elementary

SKILL Critical thinking—analyzing, synthesizing, and evaluating

ECONOMIC CONCEPTS Capital goods resources; technological development; productivity

DATA SOURCE Demonstration

INTRODUCTION A qualified adult or older student demonstrates the use of a duplicating machine to show how technological development increases production and productivity and makes jobs easier for the worker. The lesson can be used in a unit on industrialization and to develop awareness about work and career choices.

OBJECTIVE Students will analyze and evaluate the effect of technology on production by:

1 Conducting an experiment in which they compare production of a good by two different methods;

2 Giving examples of ways a capital good (machine) can help people by drawing an imaginary machine that helps students learn.

MATERIALS

1 Duplicating or copying machine;

2 Duplicating master and 100 sheets of duplicating paper;

3 Five sheets of writing paper for each student;

4 Watch or clock, preferably with sweep-second hand.

PROCEDURES

1 Tell the person who will give the demonstration—usually the school secretary or a teacher's aide—what specific information you want the students to learn, background information on the class, and the length of time available for the presentation. Suggest a practice run-through if the person is not used to speaking to a class. Shortly before the demonstration, reconfirm the date, location, and amount of time available.

2 Prepare the students for the demonstration:

a Tell the class the name and position of the person who will give the demonstration;

b Tell the students what kind of machine the person will demonstrate.

3 The lesson

a Ask the demonstrator to bring the duplicating machine to the classroom. Introduce the person to the class.

b Explain to the class that machines help people to increase the production of goods and services and that the duplicator can increase the production of worksheets.

c Ask the demonstrator to explain how the duplicator operates.

d Tell the students that they are going to conduct an experiment. Write the following sentence on the chalkboard: "Machines help people to increase their production of goods and services."

e Tell the students that they are going to print the above sentence on sheets of paper as many times as they can in two minutes, once only on each sheet of paper. Distribute the writing paper to the students. While you do so, the demonstrator should print the sentence on the spirit master and mount it on the machine.

f Select one student to be the timekeeper. Have all the materials ready and check to see that everyone understands the assignment.

g Conduct the experiment.

NOTE: For brevity, the references in the lesson are to a spirit duplicator, but any available copying device—ditto machine, mimeograph, etc.—is suitable. If a duplicator and someone to demonstrate its use are not available in your school, you can use an electric pencil sharpener and various hand and mechanically operated sharpeners to illustrate the effect of technological improvements on productivity. You will need a generous supply of unsharpened pencils for the demonstration. (You can sharpen at least 1½ dozen pencils in two minutes in an electric sharpener.)

SOURCE: Adapted from *The Book Company*, by Margit McGuire and Diane Reinke (Washington State Council for Economic Education, 1979), Lessons 5 and 13. Used with permission of the Washington State Council on Economic Education.

h Count the number of copies produced on the machine. Add up the number of copies produced by individual students and divide that sum by the total number of students. Remark that in two minutes the students could only produce _____ copies per student by hand, but one person using the machine was able to produce _____ copies. Tell the students that using the machine increased *productivity*, the number of pieces that could be made by each person in a given amount of time.

i To involve all students in the following discussion have them first discuss the questions in small groups. Ask:

(1) How does the machine help production?

(2) Do you think _____ likes to use this machine?

(3) What might happen if we didn't have a duplicator in our school?

(4) What businesses might use a duplicator?

(5) Can you name other machines that have helped increase the production of some good or service?

(6) Do you think machines are good? Why or why not?

(7) What would happen if a supermarket could no longer use its automatic cash registers, which add up a customer's purchases, add taxes (if any), and calculate any change due to the customer? (Pick other businesses with which students are familiar and ask similar questions.)

j Have students draw an imaginary machine designed to help them do their work at school. They may draw any kind of machine they wish to.

k After the drawings are finished, have students explain how the machines work and how the machines will help them to do their school work.

4 Follow-up

a Other lessons should follow to reinforce the concepts of capital resources (capital goods) and technology.

b Write a thank-you letter to the demonstrator.

3.8 What's the Pay?

GRADE LEVEL Middle school

SKILL Research—locating and interpreting information

ECONOMIC CONCEPTS Human resources; human capital

DATA SOURCE Newspapers

INTRODUCTION Payment for labor—whether blue collar or white collar, whether as an owner* or as an employee—is the main constituent of income of most households. Such "labor income" varies among individuals because of differences in the market value of individuals' labor service. This lesson is designed to show that some occupations command higher compensation than others because the former require special skills that must be developed through training or specialized education. These personal skills, special abilities, and talents of individuals are elements of *human capital*. Time spent in training or education is *investment in human capital*.

Students use want ads taken from the local newspaper to obtain information on various types of jobs available and to determine relationships between human capital and salary level commanded.

This lesson can be readily incorporated in a unit on career awareness.

OBJECTIVE Students will find and interpret information about work available in the local community by:

1 Picking out at least three high-paying and three low-paying jobs advertised in the local newspaper;

2 Determining what special skills or abilities (training and/or education) are needed for each job selected in objective 1.

3 Making statements about the relationship between earnings and human capital.

MATERIALS

1 Several copies of the help-wanted section of a local newspaper.

2 Classroom set of copies of Handout 3.8A, "Local Job Openings"

3 Several pairs of scissors

4 Several bottles of library paste or several rolls of cellophane tape or several staplers (see Procedure 3).

PROCEDURES

1 Ask:

a How do most people earn most of their income?

b If you were looking for work, what sources would you use to find out what job opportunities were available in our community?

List the sources suggested by the students on the chalkboard.

2 Tell the class that it will use newspaper help-wanted ads to find out what types of work are available in the local area. Distribute Handout 3.8A as well as copies of the help-wanted section of the local newspaper. Depending on the number of copies available, students will work alone, with partners, or in small groups. (Most newspapers will provide teachers with multiple copies of one edition for classroom use.) Explain the meaning of "help wanted" and tell students where to find that section in the local newspaper(s). After distributing the handout, tell students that they are to find help-wanted ads for three high-paying jobs and three low-paying jobs. Since pay periods vary from job to job, tell students to think in terms of salary (dollars) per month when determining high- and low-paying jobs. On the chalkboard work through a few conversion problems, e.g., dollars per week to dollars per month, dollars per year to dollars per month, etc.

* The income earned by owners of unincorporated businesses (including storekeepers and farmers as well as professionals such as physicians and lawyers) consists of two elements. One element is payment for the owners' labor in running the business; it is analogous to a wage or salary. This portion often constitutes most of the income. The other element is the payment received for the use of the money spent to conduct the business, i.e., for equipment, materials, rent, and the like. The second portion constitutes a return (profit) on the owners' investment in the business and, especially in the case of professionals, return on the investment in human capital they have acquired, i.e., the cost of training needed in order to pursue the profession.

SOURCE: Created for this project by Elmer Williams.

3 Have students paste, tape, or staple the ads to the handout in the space provided. Allow time for students to complete this step.

4. After students complete Step 3, tell them to reread all the ads carefully in order to find out what special skills, abilities, and/or minimum education each job calls for and to write the requirements on the line provided in the handout beside the ad. Students can get the information by reading the ad, by inference, or from prior knowledge about the advertised position. Explain that those special skills, abilities, and talents are called human capital and that education is one way of increasing (investing in) human capital. Have students give examples of human capital, using the lists of job requirements as guides.

5 Have each student write a statement describing the relationship between the salaries offered and the kinds of human capital required for the advertised jobs. Check the answers for accuracy.

6 Have some students read their answers to the class. Allow time for discussion of answers.

Handout 3.8A

LOCAL JOB OPENINGS

Name _____ Class _____

HIGH-PAYING OPENINGS		LOW-PAYING OPENINGS	
Newspaper Ads	Special Skills/ Abilities Needed	Special Skills/ Abilities Needed	Newspaper Ads

As the final task in completing this handout, write a statement describing the relationship between level of salary offered and special skills, talents, abilities (human capital) needed for the advertised jobs.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.9 How Many Should We Buy?

GRADE LEVEL Middle school

SKILL Research—locating, organizing, and interpreting information

ECONOMIC CONCEPT Demand

DATA SOURCES Tables and charts

INTRODUCTION Students collect, tabulate, and chart data on the demand for a good. (Demand is the quantity of a good or service buyers would be willing and able to buy at various prices at a given time.) The lesson can be integrated into a unit on supply and demand.

OBJECTIVES Students will organize and interpret information on individual and group demand by:

1 Stating the quantity of a good they would be willing and able to buy at each of a number of different prices;

2 Working together to draw up a schedule (table) illustrating class demand for the good at various prices;

3 Working together to construct a chart depicting a demand curve, using the class demand schedule;

4 Demonstrating their understanding that the lower the price of a good, the more of it will be demanded, and the higher the price, the less will be demanded.

MATERIALS

1 One apple

2 Classroom set of copies of Handout 3.9A

3 Transparencies of Visuals 3.9A and 3.9B

PROCEDURES

1 Show the apple to the students. Describe it (weight, variety) and let students examine it. Then say: "Raise your hand if you would be willing to buy apples such as this one."

2 Distribute Handout 3.9A. Explain that in the column labeled "Quantity" students will write the number of apples they would be willing to buy at *each* listed price. Point out that someone who is willing to buy two apples at 30 cents each would be willing to buy *at least* two apples (perhaps more) at 25 cents per apple. Then, for each price in turn, ask: "How many apples would you buy if apples were _____ cents each?" and have students write the amount they would buy on their schedules.

3 After students complete the handout, project Visual 3.9A or copy it on the chalkboard. Ask one or two students to help out as tellers. Have students raise their hands with finger extended to show the number of apples they would buy at each price as you announce it. Write the total amount demanded on the indicated line of the class schedule. (NOTE: If the class is small, students can announce their bids in turn.)

4 Project Visual 3.9B. Select students to plot the data on class demand as points on the chart. Then connect the points.

5 Ask questions requiring students to read and interpret the graph. For example:

a How many apples was the class willing to buy at 25 cents per apple?

b At what price was the class willing to buy _____ apples?

c As the price of each apple went up, what happened to the number of apples the class would buy?

d As the price of each apple went down, what happened to the number of apples the class would buy?

e What general statement can you make about how the price of apples influenced the number of apples the class would buy?

f Do you think these statements are true for other goods (candy, cars, hats)? How could you find out?

SOURCE: Adapted from *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Intermediate Level* (New York: Joint Council on Economic Education, 1978), pp. 27–28.

6 Follow-up

a If you would like to have students practice plotting data, give each student a sheet of blank graph paper. Tell the students that they are going to graph their own demand schedules (Handout 3.9A). Use Visual 3.9B as an example and remind them to do the following, offering help as needed:

(1) Draw vertical (left) and horizontal (bottom) axes.

(2) List the prices along the left-hand axis and the quantities along the bottom axis and label each axis. Point out that the amounts must be in an ordered sequence with equal differences between adjacent amounts (for example, 0, 2, 4, 6, *not* 0, 2, 3, 5, 9).

(3) Compose a title for the graph as a whole.

c Encourage more able students to conduct a survey of the demand of at least five persons for some different product. Their graphs illustrating demand for the product should then be shown to the class and/or displayed on the class bulletin board.

d Introduce information to the class that would change the demand for apples, for example, an increased allowance, a sale of oranges (substitute good), etc. Ask what effect these new circumstances would have on the demand for apples.

Handout 3.9A

MY DEMAND SCHEDULE

Name _____ Class _____

Price per Apple	Quantity I Would Buy
50¢	_____
45¢	_____
40¢	_____
35¢	_____
30¢	_____
25¢	_____
20¢	_____
15¢	_____
10¢	_____
5¢	_____
1¢	_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Visual 3.9A

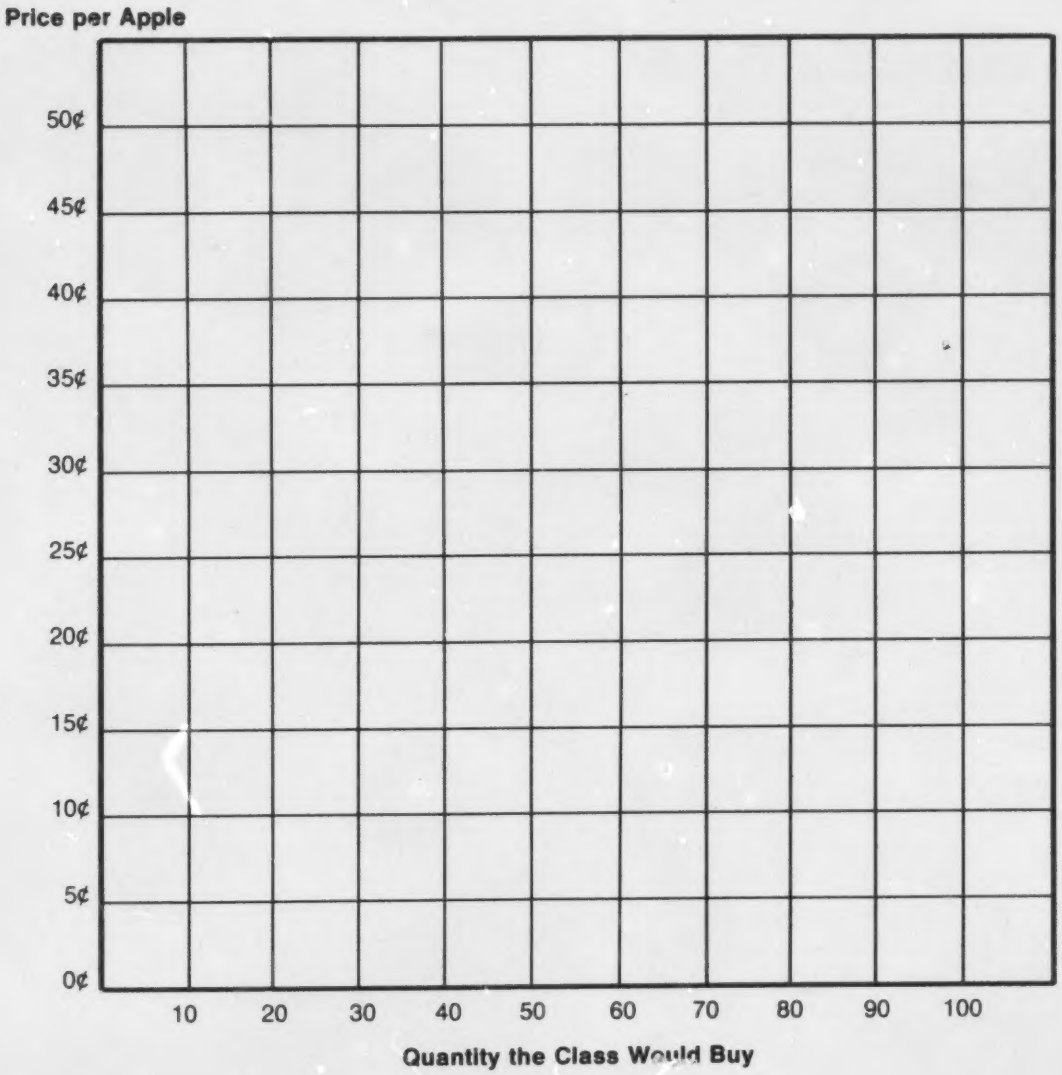
CLASS DEMAND SCHEDULE

Price per Apple	Quantity the Entire Class Would Buy
50¢	_____
45¢	_____
40¢	_____
35¢	_____
30¢	_____
25¢	_____
20¢	_____
15¢	_____
10¢	_____
5¢	_____
1¢	_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Visual 3.9B

CLASS DEMAND



From *Master Curriculum Guide for the Nation's Schools,* Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses,* 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.10 Who Gets What?

GRADE LEVEL Middle; secondary

SKILL Critical thinking—analyzing

ECONOMIC CONCEPTS Income distribution; per capita income

DATA SOURCE Maps and tables

INTRODUCTION Students use data on per capita income of states to delineate economic regions on a map of the United States. The lesson would be appropriate at the beginning of a study of the United States or in a high school geography class.

OBJECTIVE Students will delineate and analyze economic regions of the United States by:

1 Ranking the states by their per capita income;

2 Color coding a map of the United States to show the highest, intermediate, and lowest thirds of the states by per capita income;

3 Determining economic regions on the basis of the color codes;

4 Proposing hypotheses to explain the existence of these regional economic patterns.

MATERIALS Classroom set of copies of handouts 3.10A and 3.10B; supply of crayons, colored pencils, or marking pens.

PROCEDURES

1 Explain the meaning of per capita income—total income of a group divided by the total number of people in the group. If necessary, use the following data to clarify the concept:

Per Capita Weekly Income of a Class

Pupils	Allowance per Week	
1	$5.00	1 × $5.00 = $ 5.00
2	$3.50	2 × $3.50 = $ 7.00
4	$3.00	4 × $3.00 = $12.00
7	$2.50	7 × $2.50 = $17.50
6	$2.00	6 × $2.00 = $12.00
3	$1.50	3 × $1.50 = $ 4.50
2	$1.00	2 × $1.00 = $ 2.00
24		Total income = $60.00

SOURCE: Created for this project by Elmer Williams.

Therefore, the per capita weekly income of the class is $60/24 = $2.50.

2 Explain that the per capita income of a city, state, country, or other geographic region can be determined in like manner and that the data the students will use, in Handout 3.10A, show the per capita income of each of the fifty states of the United States.

3 Distribute Handout 3.10A. Ask students to find:

a The state with the highest per capita income;

b The state with the lowest per capita income;

c The state with a per capita income nearest the national average.

4 Tell students to rank the states by per capita income (1 = highest per capita income; 50 = lowest per capita income). Each state's ranking should be written in the blank space to the left of the state's name. Explain to the class that the top third of the states in per capita income are those ranked 1 through 17, states ranked 18–34 make up the middle third, and the remaining states make up the bottom third.

5 Distribute the outline maps of the United States (Handout 3.10A) and the crayons (colored pencils, marking pens). Determine the color coding to be used in filling in the map, e.g., highest third = red; middle third = blue; lowest third = left blank. Tell students to complete the map and then to look for regional patterns.

6 Call on students or ask for volunteers to report orally any patterns they observed. Encourage students to propose reasons for the existence of the patterns. (NOTE: Subsequent lessons might deal with the collection, organization, and interpretation of data needed to test the students' hypotheses. Such follow-up activities would give students practice in using their research and critical thinking skills while providing continuity of subject matter.)

7 Follow-up (OPTIONAL): Have students suggest specific actions that local industries and banks, chambers of commerce, or local, state, or federal governments might undertake to raise per capita income in the "poorer" states. Discuss and list possible advantages and disadvantages of each proposal. Ask: What groups in a community or region might favor corrective action? Why? What groups might be opposed? Why?

Handout 3.10A

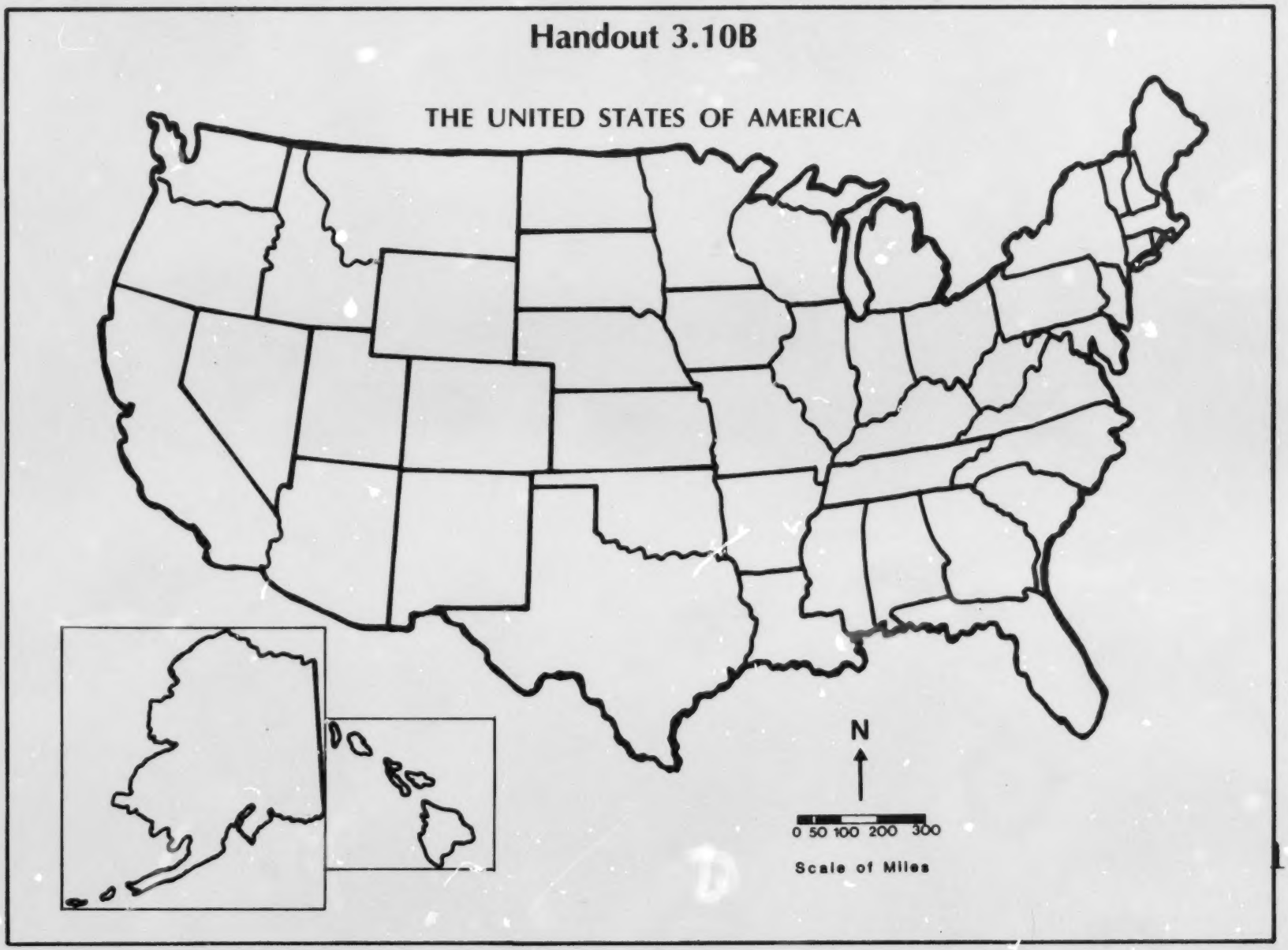
Name _____ Class _____

Personal Income Per Capita, by States, 1980
(current dollars; national average = $9,521)

____	Alabama	$ 7,488	____	Montana	$ 8,536
____	Alaska	12,790	____	Nebraska	9.365
____	Arizona	8,791	____	Nevada	10,727
____	Arkansas	7,268	____	New Hampshire	9,131
____	California	10,938	____	New Jersey	10,924
____	Colorado	10,025	____	New Mexico	7,841
____	Connecticut	11,720	____	New York	10,260
____	Delaware	10,339	____	North Carolina	7,819
____	Florida	8,996	____	North Dakota	8,747
____	Georgia	8,073	____	Ohio	9,462
____	Hawaii	10,101	____	Oklahoma	9,116
____	Idaho	8,056	____	Oregon	9,317
____	Illinois	10,521	____	Pennsylvania	9,434
____	Indiana	8,936	____	Rhode Island	9,444
____	Iowa	9,358	____	South Dakota	7,806
____	Kansas	9,983	____	South Carolina	7,266
____	Kentucky	7,613	____	Tennessee	7,720
____	Louisiana	8,458	____	Texas	9,545
____	Maine	7,925	____	Utah	7,649
____	Maryland	10,460	____	Vermont	7,827
____	Massachusetts	10,125	____	Virginia	9,392
____	Michigan	9,950	____	Washington	10,309
____	Minnesota	9,724	____	West Virginia	7,800
____	Mississippi	6,580	____	Wisconsin	9,348
____	Missouri	8,982	____	Wyoming	10,898

SOURCE: *Statistical Abstract of the United States, 1981* (102d Edition), U.S. Department of Commerce, Bureau of the Census, 1981, p. 429.

Handout 3.10B



From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.11 Life During the Great Depression

GRADE LEVEL Secondary

SKILL Research—collecting information

ECONOMIC CONCEPTS Depression; unemployment

DATA SOURCE Resource person

OBJECTIVE Students will collect data about the Great Depression by interviewing someone who has lived through that period and will tape-record or write down answers to questions on a specific topic.

MATERIALS Tape recorder and audio cassette (optional)

INTRODUCTION An articulate person who has lived through a significant historical period like the Great Depression can give students a feeling of immediacy about the times that cannot be obtained from more objective sources, such as textbooks. Before planning the interview lesson in detail, you may wish to consult the books listed at the end of this lesson. In any case, before preparing the class for the interview, you should provide some factual background about the depression. Be certain students understand the economic topics about which they are to seek further information through the interview.

The follow-up activities are necessary to help students evaluate interviewing as an information-producing technique and to reinforce the knowledge gained from participating in the activity.

PROCEDURES

1 Prepare for the interview:

a Select as the resource person someone who will feel comfortable about being interviewed and who will be able to provide accurate, interesting recollections about the Great Depression.

b Tell the person the reasons for the interview and provide a list of the topics the students expect to explore as well as examples of questions that might be asked.

c Give the person *written* information about the class, place, date, time, and length of interview.

d Reconfirm the time and place with the resource person a day or two before the interview.

e Introduce the subject: the Great Depression, 1929–1939. Provide some factual background about it, if you have not done so already in earlier lessons. Ask students what they would like to know about that period and write the suggestions on the chalkboard. Topics might include income distribution, behavior of prices or price level, values and attitudes of the time, types of work people did, effects of the depression on family life, government policy for dealing with the depression. Encourage students to participate in the discussion by telling some interesting stories about the period or by providing some background information.

f Explain to students that a person who lived through the depression will visit the class to be interviewed.

g Using the list developed in step 1e and adding to it if necessary, assign groups of students to work on specific topics.

h Explain that each group is to write interview questions related to its topic. Tell students this may require additional research in textbooks, encyclopedias, etc., in order to frame pertinent questions. Emphasize that successful interviewers make it a point to inform themselves ahead of time about the subjects they will ask questions on. Students will also need to decide how their group will conduct its portion of the interview.

i Since the primary emphasis of the lesson is on gathering data about a particular period, students should be given an opportunity to practice note-taking by participating in practice interviews of each other or the teacher.

j Once the questions are written, collect them and check them for appropriateness.

2 The interview

a On the day of the interview, return the questions to the groups and allow a few minutes for everyone to get organized.

b Introduce the resource person.

c Allow the groups to conduct their interviews. (NOTE: You may want to tape-record the interviews for future reference.)

SOURCE: Created for this project by Margit McGuire.

d Thank the resource person and briefly summarize the information presented.

3 Follow-up

a Lead the class in a discussion and evaluation of the interview. A portion of the discussion might focus on evaluating the effectiveness of interviewing as a means of gathering information.

b Conduct lessons on the Great Depression to reinforce the information obtained during the interview. Students may use this information as a basis for doing additional research and reporting on their assigned topics.

c Send a thank-you letter to the speaker.

4 Suggested reading (for teacher):

- Frederick Lewis Allen, *Only Yesterday*. New York: Harper & Row, 1964. Paperback. Originally published in 1931.
- John Kenneth Galbraith, *The Great Crash* (Boston: Houghton Mifflin, 1954).
- Broadus Mitchell, *Depression Decade: From New Era Through New Deal, 1929–1941*. White Plains, N.Y.: M E Sharpe, 1977. Paperback.
- Studs Terkel, *Hard Times: An Oral History of the Great Depression*. New York: Washington Square Press, 1978. Paperback.

3.12 Meeting a Demand

GRADE LEVEL Secondary

SKILL Critical thinking—analysis and evaluation

ECONOMIC CONCEPTS Economic wants; factors of production

DATA SOURCE Diagrams

INTRODUCTION Producers use resources (natural, human, and capital goods) in a succession of intermediate stages of a production sequence that transforms the resources into goods that satisfy people's wants.

Students analyze the separate stages in a "Want-Satisfaction Chain" for the production of jeans and prepare a similar analysis using a want of their own as an example. The activity could serve as one of the introductory lessons for an economics course.

OBJECTIVES Students will analyze and evaluate a want-satisfaction chain by:

1 Describing resources, events, and processes associated with each stage of the chain and determining relations among the stages;

2 Creating a want-satisfaction chain for a want of their own;

3 Evaluating the accuracy of the want-satisfaction chain as a model for representing the steps in satisfying their own economic wants.

MATERIALS

1 Transparency of Visual 3.12A, Want-Satisfaction Chain diagram;

2 Classroom supplies of newsprint or construction paper.

PROCEDURES

1 Project the transparency. (Temporarily cover the part called "Manufacturing Jeans.") Define the terms in the chart and then ask, "Suppose a consumer wants a new pair of jeans?" Have students analyze the steps in the production sequence by eliciting comments concerning resources, events, and processes that would be involved at each stage. Jot down key words on the chalkboard or have students take notes. After the class completes this part of the exercise, uncover the lower part of the transparency and have students check their answers.

2 Tell students to write down the name of a want of their own (other then jeans). Distribute the sheets of construction or newsprint paper and tell students they are to develop their own chains for the want they selected, using the chain shown in the transparency as a model. Tell students to write the description of each stage within the corresponding geometric shape. Encourage students to use the library or other reference sources to obtain the needed data. (If necessary, schedule completion of the project at a later meeting of the class, so that students have time to collect the information.)

3 Have students present their want-satisfaction chains to the class.

4 To conclude the lesson, conduct a class discussion to find out whether the chains are accurate. For example, ask:

a Were there things you wanted to include which you had a hard time fitting into the stages of the model chain?

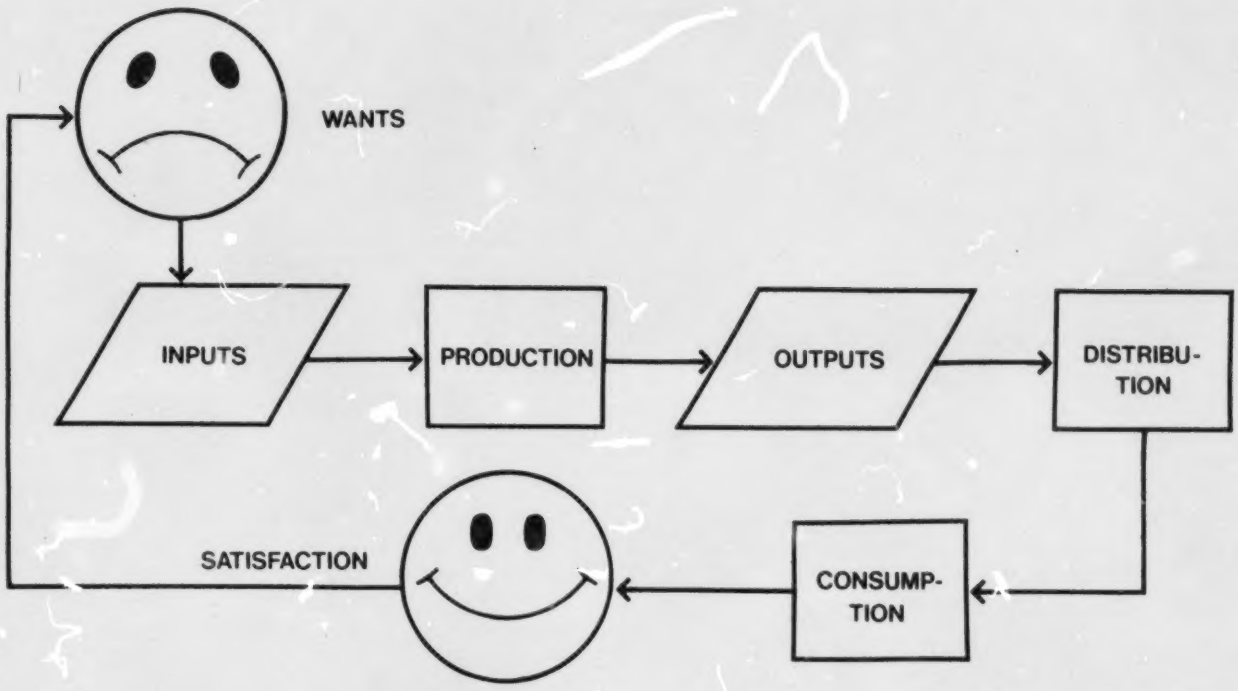
b If so, how would you change the model to more accurately reflect what you think you would have to do to satisfy your want?

c Why is there an arrow from satisfaction back to want?

5 OPTIONAL: Interested students might look for magazine or newspaper pictures to illustrate each stage of their chains.

Visual 3.12A

WANT-SATISFACTION CHAIN*



MANUFACTURING JEANS[1]

Inputs for a jeans manufacturer: Denim; findings (zippers, buttons, thread); packing materials (sheet plastic, string, tape); cutting, sewing, packing machinery; energy (for heat, light, power); labor: designers, pattern makers, cutters, sewing machine operators, sample hands.

Production: Humans use machinery and their own labor to fashion denim cloth into jeans.

Final product: Jeans.

Distribution: Jeans may be shipped directly to retailers for sale to consumers or may be shipped to wholesalers for redistribution to retailers.

Consumption: Jeans are bought by consumers who literally consume (or wear out) the garment, satisfying a want for a popular, fashionable product.

---

* The diagram is from *Economics in Society: Concepts and Institutions*, by Suzanne Wiggins Helburn, John G. Sperling, Robert G. Evans, and Elizabeth J. Lott. © 1974 by Addison-Wesley Publishing Company, Inc. Printed by permission.

1 For an interesting, detailed description of the production of jeans, see Elmer U. Clawson, *Our Economy: How It Works* (Reading, Mass.: Addison-Wesley Publishing Company, 1980), pp. 49–93.

3.13 What's the Relationship?

GRADE LEVEL Secondary

SKILL Critical thinking—analyzing

ECONOMIC CONCEPTS Economic growth; real GNP; unemployment

DATA SOURCE Charts

INTRODUCTION A unit on the social problems resulting from unemployment is often included in secondary courses in Problems of Democracy and/or American Government. In this lesson, students study the relationship between unemployment and economic growth by analyzing economic data presented in two graphs.

OBJECTIVES Students will use charts to analyze the relationship between the unemployment rate and the annual rate of change in real GNP between 1950 and 1980 by:

1 Pointing out periods characterized by a high rate of unemployment;

2 Pointing out periods characterized by a low rate of annual growth in real GNP;

3 Describing the relationships between the unemployment rate and the rate of annual growth in real GNP.

MATERIALS Transparency and classroom set of copies of Handout 3.13A; classroom set of copies of Handout 3.13B.

PROCEDURES

1 Distribute both handouts. Review definitions of real GNP and the unemployment rate and check that students understand these terms. (Real GNP: market value in constant dollars, i.e., adjusted for changes in the general price level of final output of goods and services produced in the United States; unemployment rate: percent of U.S. civilian labor force 16 years old and over who are unemployed and actively looking for work.)

2 Project Handout 3.13A. Tell students to look at the top chart. Point to the zero baseline. Remind students that plots above the baseline mark years of growth in real GNP and plots below the baseline mark years of decline.

3 Ask:

a In what year did the economy experience the largest percentage rise in real GNP? (Ans.: 1950.)

b In what years did the economy experience the largest percentage fall in real GNP? (Ans.: 1954, 1975.)

c How would you describe the annual percentage change in real GNP between 1961 and 1969? (Ans.: GNP rose steadily during the period.)

4 Discuss answers to the last question. Then tell students to write their descriptions of the behavior of real GNP during 1961–1969 in the space provided in their worksheets.

5 Tell students to look at the other chart, depicting unemployment rates from 1950 to 1980. Ask:

a In what year was the unemployment rate highest? (Ans.: 1975.) Lowest? (Ans.: 1953.)

b What words would you use to describe unemployment in the United States between 1961 and 1969. (Ans.: It declined steadily.) After discussion, ask students to write their description in the space provided in Handout 3.13B.

6 Tell students that they are to use the two charts to:

a Write the descriptions for the other periods listed on the worksheet.

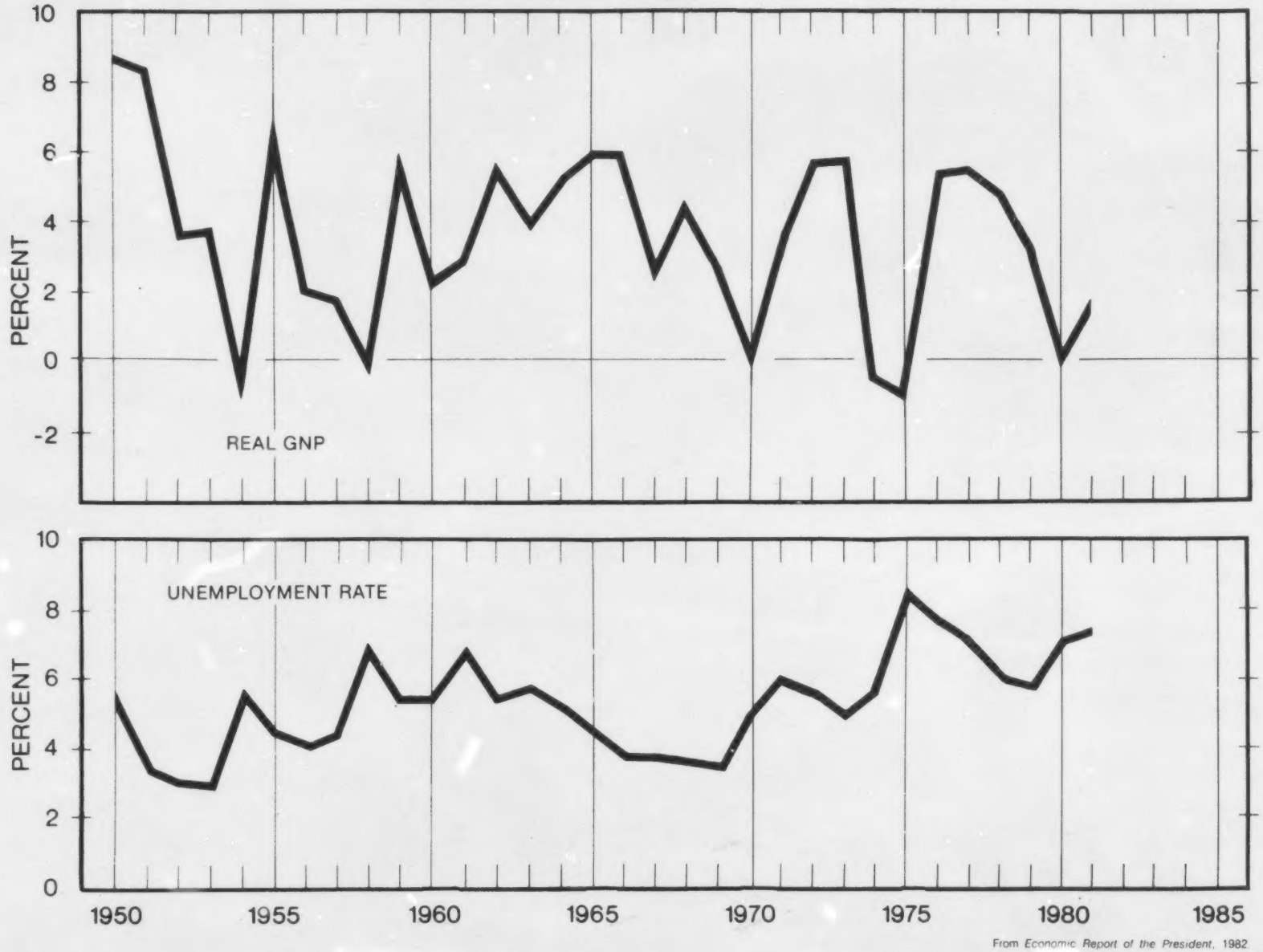
b Study the accumulated data and write a description of the relationship between the change in GNP and the unemployment rate on the back of the worksheet.

c OPTIONAL: Have students select intervals on the chart other than those given in Handout 3.13B, write descriptions in the space labeled "Other," and check to see if the relationship holds true in the selected years.

7 After students complete the worksheets, have them discuss their answers. If students are able, encourage them to relate events in the United States in each period that may have had an effect on the percent change in real GNP and/or the unemployment rate. To complete the lesson, separate the graphs by cutting the transparency. Place the chart for real GNP on the one for the unemployment rate so that the scale of years coincides. Students should be able to see that, generally, growth in real GNP is inversely related to the unemployment rate.

SOURCE: Created for this project by Elmer Williams.

Handout 3.13A



From *Economic Report of the President*, 1982

Handout 3.13B

WHAT'S THE RELATIONSHIP?

Name _____ **Class** _____

Assignment: First complete the table below as directed by your teacher. Then write a description of the relationship between the annual rate of growth of real GNP and the rate of unemployment on the back of this handout.

Periods	Description of Annual Growth Rate in Real GNP	Description of Unemployment Rate
1961–1969		
1950–1953		
1975–1978		
1978–1980		
1973–1975		
1955–1958		
Other		

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

3.14 Pleasantville

GRADE LEVEL Secondary

SKILL Critical thinking—analyzing and evaluating

ECONOMIC CONCEPTS External cost; external benefit

DATA SOURCE Simulation

INTRODUCTION Some effects of the production and consumption of goods and services may fall upon groups and individuals other than those who produce or consume these goods and services. These so-called spillover effects are termed external costs or external benefits. Industrial pollution that depletes formerly abundant fishing grounds is an external *cost* to those who customarily fish in those waters. Conversely, the abatement of pollution along, say, a previously contaminated river may provide external *benefits* to those who live or own property along the river because the area has become more healthful and pleasant. (Not all externalities concern the physical environment: education has beneficial spillover effects on the social environment; failure to enforce food inspection laws can injure the health of many.)

Students analyze a problem by playing roles as community leaders, concerned citizens, and other members of a small city. The simulation requires the students to make decisions about external costs and benefits.

OBJECTIVES Students will analyze and evaluate the external costs and benefits of a situation by:

1 Participating in a simulation;

2 Advocating a particular point of view.

MATERIALS A 24″ × 36″ enlargement or transparency and/or a classroom set of copies of the map of Pleasantville (Visual 3.14A); classroom set of copies or transparency of Handout 3.14A

PROCEDURES

1 Explain to the class that they will be assuming the roles of community leaders, concerned citizens, and other members of the city of Pleasantville and will be making decisions about its downtown parking problem.

2 Present the concept of externality (see Introduction). Allow time for students to ask questions and give examples, to be sure they understand the term.

3 Either project the map, distribute a copy to each student, or post the enlargement at the front of the room. Point out features such as street names, location of stores, roads, parking lots, etc.

4 Distribute Handout 3.14A or project it and tell students to read it carefully.

5 After the class has read the background information and studied the map, assign students to one of the five interest groups or the City Council. Tell Council members that they will be responsible for conducting the town meeting: they will have to plan the physical layout of the hearing, including seating arrangements; provide a table for the Council; keep order; and arrange to give equal speaking opportunities to all the interest groups.

6 Let students meet in their groups for fifteen minutes to prepare a position statement or plan other actions they consider desirable for promoting their cause.

7 After fifteen minutes, tell the City Council to call the town meeting to order and conduct the hearing.

SOURCE: Adapted from *In the Marketplace* (Olympia, WA: Superintendent of Public Instruction, State Department of Education, 1978), pp. 117–122. Used with permission of the Superintendent of Public Instruction, State of Washington.

8 At the conclusion of the hearing (at least fifteen minutes before the end of class), ask the City Council to confer for five minutes and render its decision. (NOTE: If necessary, the hearing can be continued at the next session of the class.)

9 After the Council announces its decision, ask:

a Do you think the City Council made a fair decision? Why or why not?

b Which interest group was the most influential? Why?

c Which group will suffer the greatest external cost? Which group will receive the greatest external benefit? (NOTE: Externalities will fall on groups other than those directly engaged in the ownership, construction, operation, or use of the parking garage. External benefits, for example, will accrue to owners of nearby businesses and to residents of the area, who will be able to park their cars on the streets more easily; external costs will be borne by, for example, the residents of the housing project, who will be displaced, and users of the park, who will lose space for recreation. To emphasize these points and help students answer the questions, ask questions such as these: Which groups or organizations would be involved in constructing the garage? Who would be paying directly for the construction? For parking cars there? Have the class join you in drawing up a list of those who would be directly involved in the garage project. Put the list on the chalkboard.)

d Can you give examples of external costs and external benefits resulting from actions undertaken in our community? In our state?

10 If necessary, allow time at the beginning of the next meeting of the class to conclude the discussion and summarize the results.

Handout 3.14A

BACKGROUND INFORMATION

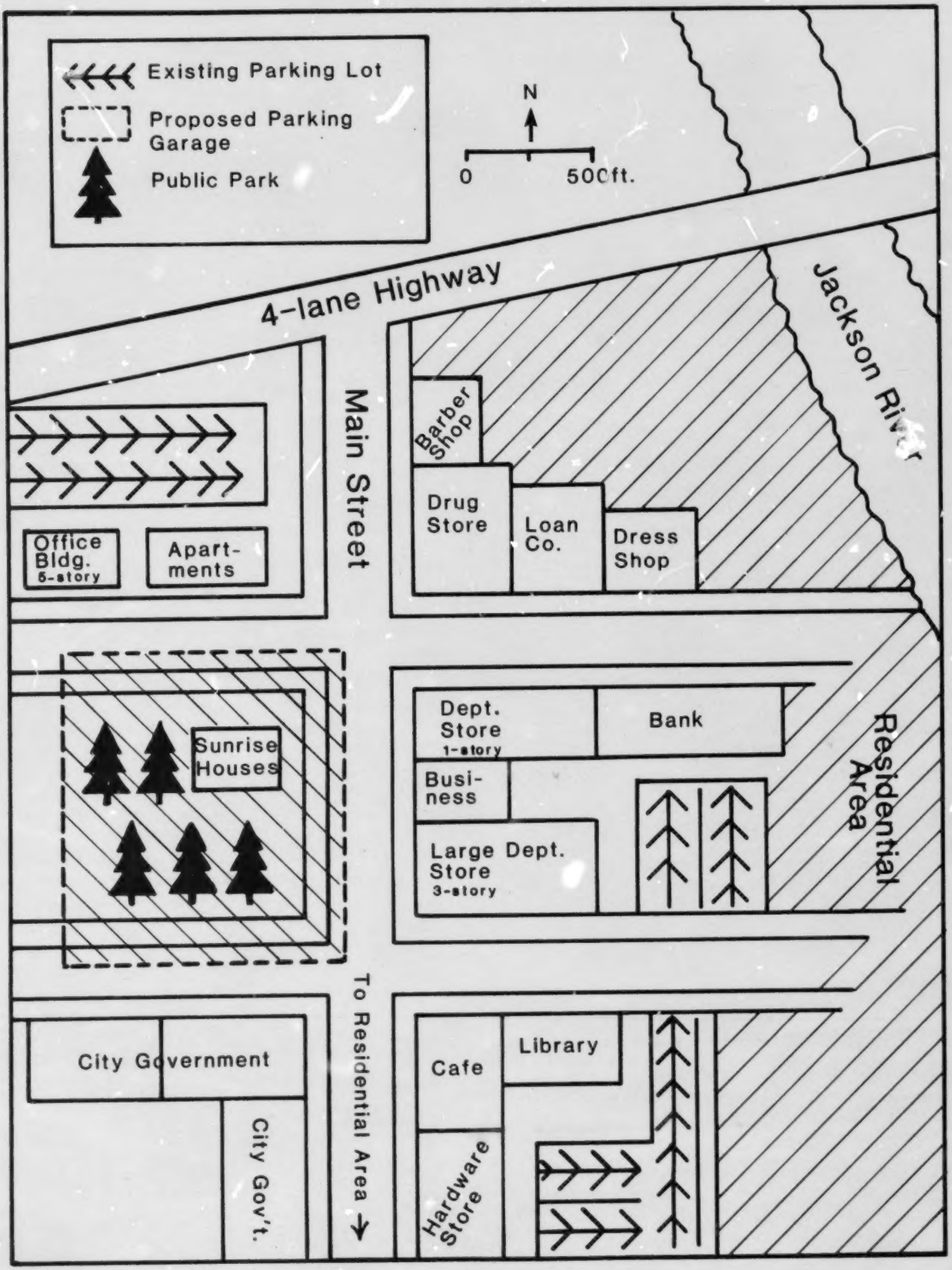
Pleasantville is a city on the Jackson River in the United States. Population is 75,000 and increasing, causing demands for additional downtown parking. The Business Association of Pleasantville has requested the City Council to rezone a section of the downtown area for a parking garage large enough to accommodate 400 cars. The proposed site is located in the center of the city on Main Street and is one block from a four-lane highway. The rezoning request is for approximately half of one city block. On that site now are a low-rent apartment complex, called Sunrise Houses, and about one quarter of the only public park in the area. Present parking space in the area is inadequate.

The groups involved in the proposal are:

- The Business Association of Pleasantville (BAP)
- Save Our Parks Committee (SOP)
- Street Improvement Committee
- Tenants Association of Sunrise Houses
- City Planning Commission
- City Council

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Visual 3.14A


Existing Parking Lot
Proposed Parking Garage
Public Park
N
0
500ft.
4-lane Highway
Jackson River
Main Street
Barber Shop
Drug Store
Loan Co.
Dress Shop
Office Bldg. 5-story
Apart-ments
Sunrise Houses
Dept. Store 1-story
Bank
Busi-ness
Large Dept. Store 3-story
Residential Area
To Residential Area
City Government
City Gov't.
Cafe
Library
Hardware Store

4 Value Analysis

Values education has received considerable public and professional attention during the last decade. Although an implied function of schooling has always been to inculcate or reinforce selected character traits in students, only recently have these educational purposes been specifically acknowledged. The result has been a plethora of competing curricula as well as extensive professional debate and public controversy. The reasons for this increased concern need not concern us here. Regardless of what the catalysts for values education were, a definite movement now exists to systematically incorporate values or valuing in the school curriculum.

A significant part of the professional debate concerns the definition of values education and other key words and phrases in the values education lexicon. For the purpose of this chapter *values education* is defined as an explicit, systematic exploration of value-oriented issues. *Values* are those ideas, concepts, and social perspectives that an individual holds as important and that serve as standards in making decisions. *Valuing* concerns the processes used to determine either a personal choice or a position on a value problem.

Values education activities, like activities in other school subjects, can be organized into broad categories or approaches according to the goals sought and the methods used to reach those goals.[1] The groupings most frequently mentioned are values clarification, value analysis, and social/moral reasoning. The professional literature contains extensive discussions of the philosophical and theoretical bases of these three categories.[2] Consequently, we need not review them here. Furthermore, since the activities in this section use procedures generally characteristic of value analysis, the remainder of our discussion here concerns applications of this approach in economic education.

A major objective of value analysis is to help students learn to deal in a rational way with issues that involve preferences and values. The focus is primarily on social questions rather than personal concerns. Instructional models using value analysis emphasize logical thinking and the methods of scientific inquiry. Although the specific procedures may differ, all models generally include elements of the following format: (1) State the problem and define the value issues involved; (2) collect evidence to substantiate statements about actual or predicted consequences of alternative actions to resolve the problem; (3) appraise consequences in the light of specified criteria; and (4) justify the criteria used.[3]

The focus and procedures of value analysis make it particularly useful for examining economic issues and policies. The emphasis on rationality complements procedures used in decision-making models for economic analysis. And, as the lessons presented on the following pages illustrate, questions growing out of the value analysis process can often be used for extending and reinforcing cognitive learning.

Lesson 1, Susan's Problem, illustrates the similarity between value analysis models and models for economic decision-making. Although this particular lesson focuses on a personal problem, subsequent lessons show how to use the value analysis model in making decisions about social problems. Lessons 2 through 5 and Lesson 7 focus on value questions embedded in economic policy issues related to land use, energy, the environment, and international trade.

Lesson 6 addresses a more complex problem. As recent experience indicates, there are no clear-cut answers to many of the questions that confront our society. Lack of accord can arise as a result of inadequate information or a lack of understanding about how the economic system operates. Other and perhaps more persistent disagreements result from conflicting views as to what the goals of the economic system or their order of importance should be. The purpose of Lesson 6 is to help students understand how values influence personal expectations about the economic system, and the difficulties these conflicts of interest pose for attaining broad agreement on economic priorities and goals.

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1 One of the most helpful reviews of values education material as well as explanation of a "typology of approaches" are available in the *Values Education Sourcebook*, by Douglas P. Supreka, et al. (Boulder: Social Studies Education Consortium, 1976).

2 A useful discussion of these approaches appears in B. Beyers, *Teaching Thinking in Social Studies* (Columbus: Charles E. Merrill, 1979), pp. 268-298.

3 For a comprehensive discussion of the objectives and methods of value analysis see Lawrence E. Metcalf, ed., *Values Education*, 41st yearbook of the National Council for the Social Studies (Washington: National Council for the Social Studies, 1971).

Allan R. Brandhorst and Ronald Rosenblatt selected the value analysis lessons and wrote this overview.

A major purpose of the activities below is to make students aware of the nature of trade-offs involved in economic policymaking. Although we have attempted to include all the material needed for analyzing the problems presented in the lessons, some students may require more background information than we provide. In that case, the time allocated to the lesson should be extended so that students can collect additional data as necessary for determining what the issues are and for assessing policy alternatives. (Note also that the lessons are arranged according to grade level—elementary, intermediate, and secondary. However, lessons designated for the intermediate grades have also been used successfully in senior high school classes.)

4.1 Susan's Problem

GRADE LEVEL Elementary; middle school

ECONOMIC CONCEPTS Scarcity; choice-making

INTRODUCTION The purpose of this lesson is to give students practice in using a problem-solving model.

OBJECTIVE Students will use a problem-solving model and a decision-making grid to help them choose among desired goods when there is insufficient money to buy them all.

MATERIALS Visual 4.1A as well as classroom set of copies of Handouts 4.1A and 4.1B. (Before duplicating Handout 4.1A, insert the name of any popular entertainer or entertainment group in the blank spaces provided.)

PROCEDURES

1 Introduce the topic by asking students if they have ever faced a dilemma in which they were forced to make a choice between two things they wanted.

2 Distribute Handout 4.1A and tell students to read it.

3 Write out the five steps of the problem-solving model on the chalkboard or project a prepared copy.

4 Distribute Handout 4.1B—the information sheet and decision-making grid—and allow time for students to read the first paragraph of the handout.

5 Explain the use of the problem-solving model, tying in the first three steps with the three specific questions about Susan's dilemma. If you wish to discuss the use of the grid, project Visual 4.1A (a completed grid) or distribute copies.

6 Allow sufficient time for students to read the comments on the three questions and complete the grid. (NOTE: Since personal values usually cannot be measured exactly, it is seldom possible to decide what to do simply by adding the plusses and subtracting the minusses on the decision grid. Therefore, tell students to base their decisions on the evaluation in Step 6, but don't direct them toward any one conclusion.)

7 In order to involve all the students in the activity of choice-making, have pairs of them compare each other's responses. Then call on some students to present their choices and explain their reasons to the class. Invite questions and discussions after each presentation. Encourage students to explain their decisions in terms of the relative importance they assigned to each criterion.

SOURCE: Adapted from a project developed by John Cogan, professor of education at the University of Minnesota (1972). A modified version of this activity appears in the *Peabody Journal of Education* 57, no. 3 (April 1980) as "Teaching Economic Decision Making in the Intermediate Grades."

Handout 4.1A

SUSAN'S PROBLEM

Susan is ten years old. Her allowance is $1.00 a week. Over a period of weeks she has saved $12.00. She is very good about saving her money for goods or services she really wants. She has saved enough now to buy two _____ albums she's been wanting. _____ is a super favorite of hers. The albums are on sale this week at the local discount store for $5.80 each plus sales tax, which brings the cost to an even $6.00. So she has enough to buy the two albums.

Susan is just about to leave for the store with her dad one Saturday morning when the telephone rings. It is her best friend, Adrienne.

ADRIENNE: "Sue, have you seen the morning paper?"
SUE: "No, and I'm in a hurry now. Dad's leaving for the store and I'm going to get those two albums. Isn't that great!"
ADRIENNE: "But you don't have to get the albums. _____ is coming to St. Paul for a concert next week!"
SUE: "What! _____ is coming to St. Paul? You're putting me on!"
ADRIENNE: "No, it's true. It's in the morning paper!"

Susan drops the phone and runs into the other room to get the paper. There in the entertainment section is a full-page ad for the concert, and as she reads it, she sinks down unhappily into a nearby chair. In bold type at the bottom of the page is printed:

ALL SEATS $12.00

Susan has a problem. She has a number of economic wants and only a limited amount of money with which to satisfy them. She very much wants to see _____ in person ***but*** *she's also been looking forward to buying the two record albums for quite some time. What can she do? What choices does she have?*

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 4.1B

SUSAN'S PROBLEM: INFORMATION SHEET

People are faced with problems like Susan's nearly every day. Hers is a personal experience of the basic economic problem of *scarcity* which exists because our economic wants are relatively unlimited but the resources for satisfying those wants are limited. "Problem-solving models" offer a systematic way out of these dilemmas. There are many different models. We will use the one below to help Susan solve her problem:

The Problem-solving Model

1. ***DEFINE THE PROBLEM:*** Just what is it?
2. ***LIST THE ALTERNATIVES:*** What are all the possible ways I might solve my problem?
3. ***STATE THE CRITERIA:*** How do I decide what is most important about each solution?
4. ***USE THE CRITERIA TO EVALUATE EACH OF THE ALTERNATIVES:*** Complete the decision-making grid.
5. ***MAKE YOUR DECISION!***

Now let's take a closer look at Susan's problem, using our model. Put yourself in Susan's place. Ask yourself:

1. ***WHAT IS MY PROBLEM?*** I have a limited amount of money, and there are two things I really want to use it for, namely, the albums and the concert. But either one would use up all my money, so I have to make a choice.
2. ***WHAT ALTERNATIVES DO I HAVE?*** I can spend the $12.00 on the albums or I can spend the money on the concert, but I can't spend the $12.00 on both at once. I could also not spend my money now at all. I could save the $12.00 for something else I might want even more later. (List the alternatives in the spaces provided on the decision-making grid.)
3. ***HOW DO I DECIDE WHAT IS DESIRABLE OR UNDESIRABLE ABOUT EACH OF MY ALTERNATIVES?*** (List five or six criteria against which to judge each alternative. The following are examples. Other criteria may be more important to you. If so, list them instead of or in addition to the ones given.)
   - **a** It costs $12.00 or less.
   - **b** It's something I want.
   - **c** My parents approve.
   - **d** It will have lasting value for me.
4. ***COMPLETE THE GRID.*** If you believe an alternative meets a criterion, mark a plus sign (+) in the box opposite that alternative and under the criterion. Use a minus sign (−) to show that the alternative does not meet the criterion. Use a question mark (?) if the criterion is not appropriate or relevant to the alternative or if you are uncertain how it might rate. (You should not have many question marks. If you do, you should re-examine your list of criteria and restate them to make them clearly pertinent.)
5. ***MAKE YOUR CHOICE.*** Be able to state the reasons for your decision.

DECISION: _____

REASONS: _____

_____

_____

_____

_____

_____

_____

_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

DECISION-MAKING GRID

Name _____ Class _____

ALTERNATIVES	CRITERIA				

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Visual 4.1A

SAMPLE DECISION-MAKING GRID FOR SOLVING SUSAN'S PROBLEM

ALTERNATIVES	CRITERIA			
	Costs $12 or Less	An Economic Good That I Want	My Parents Would Approve	It Will Have Lasting Value
Get the albums	+	+	+	+
Go to the concert	+	?	−	−

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

4.2 Vegetable Garden or Park

GRADE LEVEL Elementary

ECONOMIC CONCEPT Opportunity cost

INTRODUCTION This activity is designed to help students analyze a land-use issue: Should a publicly owned vacant lot be turned into a park or into a vegetable garden? The lesson is appropriate for students in grades three through six who are studying neighborhoods.

OBJECTIVE Students will weigh the costs and benefits of alternatives by:

1 Deciding how a particular tract of public land should be used;

2 Supporting their decision by presenting specific reasons for their choice.

MATERIALS

1 Transparency or classroom set of copies of Handout 4.2A;

2 Large sheet of butcher paper, mounted at the front of the classroom, or blank sheets of acetate (and suitable markers) for use in an overhead projector.

PROCEDURES

1 Set the stage by explaining to the students that they must solve a neighborhood problem. Project Handout 4.2A or distribute copies. If necessary, read the handout to the students.

2 Ask students to state the problem. (Should the community use the lot for a vegetable garden or for a playground?)

3 Write the words "opportunity cost" on the chalkboard and pronounce them. Tell students that the opportunity cost of choosing to use the lot as a vegetable garden would be not being able to use it as a playground. Ask: What is the opportunity cost of using the lot as a playground? (Not being able to use the lot as a vegetable garden.)

4 Ask students to name some possible effects of choosing each alternative. Write the suggestions on the butcher paper or on the acetate sheet. (An example of such a list appears on the following page.) To encourage all the students to participate, you may prefer first to divide the class into small groups to discuss the results of each choice, and then have a representative from each group report its list to the whole class.

5 Each student should decide independently how the lot ought to be used. Depending on the level of skill of the class, have each student carry out one of the following activities. For Activity A, write one of the following sets of unfinished sentences on the chalkboard for students to copy and complete:

Activity A. Draw a picture of how the lot should be used and then copy and complete the sentence that describes your choice (or copy the sentence and complete it).

Set 1. The lot should be used as a vegetable garden because . . .
The lot should be used as a playground because . . .

Set 2. The lot should be used as a _____ because . . .

Activity B. Write your decision and the reasons for your choice.

6 For closure, ask:

a What was the main problem? (Deciding whether to use the lot as a vegetable garden or as a playground.)

b How many of you chose the playground? (Ask for a show of hands.)

c Using the list of pros and cons for each of the choices, ask questions such as the following:

(1) What was the opportunity cost of having a safe place to play?

(2) What was the opportunity cost of being able to buy fresh vegetables?

SOURCE: Adapted from *Master Curriculum Guide*, Part II, *Strategies for Teaching Economics: Primary Level* (New York: Joint Council on Economic Education, 1978), pp. 52–53.

Sample List

POSSIBLE EFFECTS OF CHOOSING EACH ALTERNATIVE

If you use the lot for a vegetable garden:

GAINS	LOSSES
1. You will have fresh vegetables.	1. Children can't play in it.
2. You can play in the lot when the growing season is over.	2. You will have to play in your own backyard.
3.	3.
4.	4.
5.	5.

If you use the lot for a playground:

GAINS	LOSSES
1. Children will have a safe play to play.	1. You will have to buy your vegetables.
2. Grown-ups can sit in the park and visit each other.	2. You won't be able to help grow vegetables.
3.	3.
4.	4.
5.	5.

Handout 4.2A

VEGETABLE GARDEN OR PARK?

A family lives in a neighborhood in which the city owns a vacant lot. Some children play in the vacant lot. Some people want the city to make the lot into a park and playground for children. Other people want to plant vegetable gardens in the lot. Your mother and father are going to vote on the use of the lot. They have asked you for your opinion. Should the lot be dug for vegetable gardens or should the lot be made into a park?

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

4.3 Environmental Choices

GRADE LEVEL Secondary: adaptable to middle

ECONOMIC CONCEPTS Cost-benefit analysis; externalities (spillover effects)

INTRODUCTION Middle and senior high school students use cost-benefit analysis to help them decide what kind of environment they want to live in. The focus of the case is on the issue of externalities—the costs and benefits experienced by parties who were not engaged in the economic activity that produced the spillover effects.

OBJECTIVES Students will analyze their personal values as they relate to Steeltown's crisis by:

1 Stating the problem that prompted government action in the case;

2 Describing the costs and benefits involved before and after the government took action;

3 Formulating a procedure for the manager of the American Steel Corporation plant in Steeltown;

4 Describing the possible conflicts involved if actions designed to reduce external costs result in higher internal costs: reduced employment in the steel industry because of the effect of higher prices on the demand for domestic steel.

MATERIALS Classroom set of copies of Handout 4.3A.

PROCEDURES

1 Distribute the handout. Tell students to read the case study and make a list of Robert Chamberlain's alternatives.

2 Organize the class into groups of three to five students. Direct the groups to complete the following tasks:

a Merge the lists of alternatives prepared by the group members into a single list;

b List and discuss the costs and benefits of each alternative. (Indicate who will benefit and who will pay in each case. Some of the costs and benefits will be external; others will be internal.)

c Rank the alternatives in order of desirability from Robert Chamberlain's point of view;

d Rank the alternatives in order of desirability from the group's own point of view.

3 Have the students use the information in the group reports to compile a master list of costs and benefits of each alternative.

4 Invite one or two of the groups to report on their own deliberations. Ask:

—Was the choice selected by your group as the most desirable the same as the choice the group thought Chamberlain was most likely to make? If not, why not?

—What factors did the group take into account in reaching its own decision? Would Chamberlain rank these factors in the same order as the group did? Why or why not?

—Were there differences of opinion among members of your group? Why do you think those differences occurred? How did you resolve the differences? Is everyone satisfied with the group decision?

5 Class discussion: Students should be prepared to explain their answers, using the information in the handout, relevant facts they may have learned from newspaper reading or in other class lessons, and economic concepts such as opportunity cost, cost-benefit analysis, resource allocation, law of supply and demand, etc. Using the group reports as a guide, select questions from the list below:

a What is Robert Chamberlain's problem? What are his possible choices? What are the costs and benefits of each choice to his company? To Steeltown? To him? What do you think he is likely to do? Why?

b What interest groups are involved in Steeltown's crisis? How might each of Chamberlain's possible choices affect each of these groups?

c Why might a plant manager like Chamberlain prefer that the federal government mandate a level of "safe" emission standards rather than letting the standard be set by the steel industry or

SOURCE: Adapted from *Analyzing Government Regulation: A Resource Guide*, Economics-Political Science Series (New York: Joint Council on Economic Education, 1978), pp. 27–31.

individual companies? Could voluntary actions solve the emissions problem? Why or why not?

d What factors would you consider if you were analyzing the economic contribution made to Steeltown by its mills?

e What are some of the external costs of the goods manufactured in Steeltown? In other words, what costs of manufacture are paid by people other than the producers and consumers of the products made in Steeltown? Should those third parties continue to pay the costs? If not, who should pay? How can we calculate these costs?

f Why do you suppose Steeltown's companies have not installed antipollution devices? What would happen if some firms tried to cut back on their undesirable emissions and others did not?

g Why might some workers whose families were suffering the ill effects of the polluted air support the companies that were resisting the installation of new antipollution equipment?

h Could the steel companies get together to formulate a plan for reducing emissions? (Would it violate antitrust laws?)

i What might happen to the price of steel if antipollution devices were installed?

j How might changes in steel prices affect the prices of other goods, such as automobiles?

Handout 4.3A

STEELTOWN'S CRISIS: A CASE STUDY

Steeltown's crisis began early on a November Monday when a temperature inversion settled over the city. By Tuesday morning the pollution index was dangerously high. Children as well as adults with respiratory problems or heart disease were warned to stay indoors and to avoid physical exertion. County health officials sent telegrams to the city's twenty-three manufacturing companies asking that emissions be cut by 60 percent until the emergency situation was ended. Although some firms acted immediately, emissions were down by only 20 percent on Wednesday.

At that point officials from the federal Environmental Protection Agency decided to act. Invoking emergency powers provided by the Clean Air Act of 1970, the E.P.A.'s general counsel obtained a court order halting the production of all twenty-three of Steeltown's plants. When the companies started to bank their furnaces on Thursday, there was a significant improvement in the level of emissions. A saving rain broke the inversion, and the immediate crisis was over.

Steeltown had had emergency situations before, most recently in July. This was the sixty-sixth time that pollution had reached the danger level. Intervention by the E.P.A., however, had introduced a new element. Several of the companies considered instituting suits against the federal government to recover damages incurred when production was halted. Sensitive to the layoff of 5,000 workers and the loss of a considerable amount in wages, labor union officials prepared to negotiate for contract clauses protecting their members against wage losses when plants were shut down because of such emergencies.

The worst part of the crisis was that it need never have occurred. The technology for removing the thousands of cubic feet of contaminants that each day poured out of Steeltown's stacks had been available for many years. Some of the larger companies now considered taking the necessary steps to modernize their operations. Several of the smaller firms would not be able to absorb the cost of upgrading their equipment, however, and their employees faced the possibility of permanent loss of their jobs.

Robert Chamberlain, recently appointed manager of the American Steel Corporation plant in Steeltown, had been one of the first to comply with the request of county health officials. Like other plant managers he had early acknowledged pollution problems in Steeltown but had been unable to contribute much to their solution. Until the parent corporation gave environmental quality top priority he could not justify a request for the $12 million that would be needed for pollution control.

Chamberlain believed that the E.P.A. action might work for the benefit of the American Steel Corporation. The company could afford the additional expenditures and might well recoup its costs through the sale of by-products recovered in the air-cleaning process. Furthermore, he believed American Steel would shortly have to face class-action suits brought by outraged Steeltown citizens seeking payment for losses they had suffered because of the air pollution.

Chamberlain also knew that there were company executives who disagreed with him; that not all stockholders would support spending to abate pollution; and that the possibility that profits could fall might jeopardize his career with the company.

Question: ***SHOULD ROBERT CHAMBERLAIN RECOMMEND A $12 MILLION EXPENDITURE FOR POLLUTION CONTROL DEVICES?***

SOURCE: From *Analyzing Government Regulation: A Resource Guide*, Economics-Political Science Series (New York: Joint Council on Economic Education, 1978), p. 31.

4.4 Energy Policies

GRADE LEVEL Secondary; adaptable to middle

ECONOMIC CONCEPTS Opportunity cost; cost-benefit analysis

INTRODUCTION The analytical use of the concepts of costs and benefits helps decision-makers evaluate the consequences of proposed actions. (NOTE: Some costs and benefits are social. Social costs and benefits refer to third-party effects of actions that either in their origin or their outcome cannot necessarily be expressed in economic terms. For example, a family may plant trees in front of its house. Whatever the motive of the owners, the shade of the fully grown trees will provide a benefit to passers-by that cannot always be easily measured in dollars.)

This lesson would be useful as a concluding activity in a unit on energy.

OBJECTIVES Students will use a rating scale to weigh economic alternatives.

MATERIALS Transparency of Visual 4.4A; classroom set of copies of Handout 4.4A and several sets of copies of Handout 4.4B. (Handout 4.4A may be used as a transparency instead.)

PROCEDURES

1 Introduce the lesson by explaining or reviewing the concept of externality.

2 Project Visual 4.4A. Use it to explain the rating scale. Students may question the ratings and propose other amounts. Ask: Is the dollar saving or cost of an action the sole reason why people might choose it or reject it? Why or why not? Elicit the idea that personal preference often plays a role in decision-making.

3 Organize class into groups of three. Distribute the handouts. Have groups fill out a worksheet for each of the four proposed energy policies. Taking each policy in turn, have someone in each group report its list of effects and ratings.

4 Tabulate the group totals for each policy on the chalkboard. Have students compare their group ratings with those for the class as a whole.

5 Ask students to state the opportunity cost of carrying out each policy.

6 Follow-up questions:

a Were there differences of opinion in your group about the analysis? How did your group resolve them?

b Give examples of negative and positive effects to which you assigned a high rating. Why were these important to your group? What groups in society might assign the same values to these effects as your group did? Why?

c What effect would the policy your group chose have on the importation of energy resources?

d What effects might your decision have on the economy?

e What are some possible social costs or benefits of your decision?

SOURCE: Adapted from "Energy Trade Offs in the Marketplace," Washington State Council on Economic Education and Office of the Superintendent of Public Instruction, State of Washington (1980), Lesson 12. Used with permission.

Handout 4.4A

FOUR ENERGY POLICIES

1. The United States should place no restrictions on the use of imported oil.

2. Energy prices should be allowed to rise or fall freely to the point at which the amount of energy used (demanded) equals the amount of energy supplied.

3. All energy should be rationed by the federal government and current prices maintained.

4. The federal government should levy taxes to subsidize development and use of an alternative, renewable energy source (hydrogen or solar power).

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 4.4B

WORKSHEET FOR RATING POLICY EFFECTS

Name _____ **Class** _____

Proposed Policy: _____

_____

_____

Rating scale:
Rank negative effects from −1 (least important) to −10 (most important).
Rank positive effects from +1 (least important) to +10 (most important).

Negative Effects	Rating	Positive Effects	Rating

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Visual 4.4A

RATING POLICY EFFECTS

Proposed policy: People should be prohibited from driving cars that are not properly tuned (do not burn gas efficiently).

Rating scale: Rank negative effects from −1 (least important) to −10 (most important).
Rank positive effects from +1 (least important) to +10 (most important).

Negative Effects	Rating	Positive Effects	Rating
Makes auto use more expensive	−7	Reduces engine wear	+2
Would require more frequent or more careful inspection	−5	Cuts air pollution	+6
Police would spend too much time trying to enforce the law	−10	Would increase employment at service stations	+3
Would hurt low-income people	−3		
Total	−25	Total	+11

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

4.5 Trade-offs of Trade

GRADE LEVEL Secondary

ECONOMIC CONCEPTS Opportunity cost; trade-offs

INTRODUCTION Students learn about some of the trade-offs involved in making choices regarding foreign trade policies. Students consider the costs and benefits of each choice, and learn that every choice incurs an opportunity cost.

This lesson can be used in a unit on international trade. The activities will be more meaningful if students have some understanding of specialization and comparative advantage as well as of the economic effects of trade regulation.

OBJECTIVES Students will

1 List and explain some of the costs and benefits of a specified international trade decision;

2 Demonstrate their understanding that every choice incurs an opportunity cost by listing opportunity costs of specific choices.

MATERIALS Classroom set of copies of Handout 4.5A.

PROCEDURES

1 Begin by asking students to suggest reasons why or why not they might decide to buy an expensive camera from a mail-order discount house rather than from a local retailer. (Example: local retailer provides personal service; mail-order discounter is cheaper, etc.) List the reasons on the chalkboard, arranging them in columns similar to those in the handout. Point out specific trade-offs and opportunity costs incurred that students might wish to consider in choosing between the mail discounter and the local store.

2 Distribute the handout.

3 Allow time for students to read Situation 1 and answer the questions. Ask two or three students to present their decisions and explanations to the class.

4 Have students turn to Situation 2. (You may wish to allow time for students to review the pros and cons of tariffs in their textbooks.)

5 Have students first try to justify their decision to a classmate. Then have some students present and explain their decisions to the class. Ask students to explain their reasons for designating certain factors as costs or as benefits.

SOURCE: Curricular materials developed by the Office of the Superintendent of Public Instruction, State of Washington. Used with permission.

Handout 4.5A

TRADE-OFFS OF TRADE

Situation 1

Every economic decision involves trade-offs of costs and benefits. The process is made more difficult because people seldom agree on any one position and may disagree on the importance of particular costs or benefits, including those that are exclusively economic.

As an example, consider the steel industry in the 1970s. Japan was able to produce steel more efficiently—at lower unit cost—than the United States. U.S. steel makers have questioned the efficiency claim. They have alleged that their foreign competitors—including both Japan and several West European countries—were receiving government subsidies that made possible sales at prices below those U.S. mills had to charge. The foreign producers countered by claiming that as much as a third of imported steel consisted of tubular shapes used in the production of oil-country goods and represented products that the U.S. mills could not supply. In addition, the foreign producers noted the sizable tonnage of slab steel imports. Such material, they pointed out, could only be used by the largest U.S. steel makers themselves, because the product must be processed in integrated mills.

In 1978, the Carter administration set "trigger" prices on steel imports—minimum prices below which steel could not be imported. Even so, the advantage of using foreign-made steel has persisted. Furthermore, foreign steel makers have been able to get around the "trigger" by arranging third-party "sales" and other stratagems. In 1981, imports made up a fifth of all steel used in the United States, of which the bulk came from Japan.

Question: Should U.S. companies buy U.S.-made steel or foreign-made steel? What are the costs and benefits to the United States of each decision?

Situation 2

With the escalation of oil prices in late 1973, U.S. sales of Japanese-made passenger cars began a steady increase, amounting to about a quarter of total retail sales in 1981. The four American car manufacturers suffered increasingly heavy losses, resulting in permanent plant closings and declining employment. Many enterprises associated with the automotive industry, including not only suppliers but retailers whose business depended on buying by auto workers, closed their doors. By the end of 1981 unemployment in the auto industry amounted to nearly a million persons. Furthermore, the total market for new cars had shrunk.

Japan's strength in the auto market has been in its fuel-efficient subcompacts. Detroit did not offer such sizes at all until well into the 1970s. Furthermore, the Japanese manufacturers had achieved a reputation for superior quality as compared to American makers.

The domestic car industry made substantial investments in plant and equipment in order to produce the small cars the market seemed to want in place of the traditional U.S. output of style-oriented "gas-guzzlers." The industry also tried to overcome its reputation as a low-quality producer. The Japanese government agreed to restrict the export of cars to the United States, but had not agreed, as of 1981, to open its own doors to some of the products, including cars, that the United States wanted to export.

Question: Should the U.S. government impose tariffs on imports of Japanese cars to give American manufacturers time to catch up in the small-car market?

Directions: Fill out the chart on pages 118–119 and then answer the questions that follow it.

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.

Handout 4.5A

DECISION: BUY JAPANESE STEEL		DECISION: BUY U.S.-MADE STEEL	
Costs	**Benefits**	**Costs**	**Benefits**
• Unemployment will increase in the U.S. steel industry	• Cost of products containing steel will be lowered	• Cost of products containing steel will be higher than otherwise	• Employment in U.S. steel industry stable or rising
• U.S. economic independence might decline—not enough steel-making capacity in wartime	• Encourages U.S. to shift its resources into the production of other goods it can sell more cheaply than the competition	• Encourages U.S. to use its scarce resources to produce goods it cannot sell as cheaply as the competition	• Increased U.S. economic independence—steel-making capacity will be available in wartime
• Increased trade deficit—persistent deficit could lead to weakening of dollar	• Japan will have more dollars with which to buy U.S. goods	• Japan will have fewer dollars with which to buy U.S.-made goods	• Helps keep trade deficit from getting higher

Questions:

1. What decision would you make? _____

2. Why? _____

3. What is the opportunity cost of your decision? _____

4. Which, if any, of the costs or benefits listed above are not economic ones, i.e., do not relate to the efficient use of resources or could not be measured in money? _____

Handout 4.5A (continued)

DECISION: IMPOSE TARIFFS	
Costs	**Benefits**

Questions:

1. What decision would you make? _____

2. Why? _____

_____

_____

Questions continue on facing page.

Handout 4.5A (concluded)

DECISION: DO NOT IMPOSE TARIFFS	
Costs	**Benefits**

3. What is the opportunity cost of your decision? _____

4. Which, if any, of the costs or benefits you have listed are not economic ones, i.e., do not relate to the efficient use of resources or could not be measured in money? _____

4.6 Economic Goals

GRADE LEVEL Secondary

ECONOMIC CONCEPT Economic goals

INTRODUCTION Students describe the economic goals that they think should be attainable in the United States. At the conclusion of the lesson, students should be able to state the national economic goals most important to them and recognize some of the conflicts of interest likely to arise in achieving all their objectives. NOTE: In preparation for this activity, the teacher should read "Concepts for Evaluating Economic Actions and Policies," which appears at the end of this lesson. It would also be worthwhile to examine the presentations in two or three standard economics textbooks such as:

George Leland Bach, with the assistance of David J. Teece, *Economics: An Introduction to Analysis and Policy*, 10th ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1980), Chapter 1, especially pp. 5–10;

Robert L. Heilbroner and Lester C. Thurow, *The Economic Problem*, 6th ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1981);

Campbell R. McConnell, *Economics: Principles, Problems, and Policies*, 7th ed. (New York: McGraw-Hill, 1978), pp. 9–13 and 27;

Milton H. Spencer, *Contemporary Macroeconomics* (New York: Worth Publishers, 1980), pp. 11–14.

Also useful are the following:

Goals for Americans: The Report of the President's Commission on National Goals (Englewood Cliffs, N.J.: Prentice-Hall, 1960);

A National Agenda for the Eighties: A Report of the President's Commission for a National Agenda for the Eighties (Washington, D.C.: U.S. Government Printing Office, 1980).

OBJECTIVES Students will demonstrate their understanding of the difficulties of setting economic goals in an individualistic society by:

1 Listing the broad goals they would personally like the U.S. economic system to achieve;

2 Classifying their goals according to a six-point master list of major economic goals;

3 Ranking the six-point set of goals according to their personal preferences;

4 Analyzing the conflicts and trade-offs involved in trying to achieve all six goals.

MATERIALS Either chalkboard or transparency and suitable pen for overhead projector.

PROCEDURES

1 Ask students to suggest in their own words what they want the U.S. economic system to achieve. Write the statements on the chalkboard or transparency. After you have at least 10 suggestions, review them and consolidate similar ones into single statements. Note that some statements will describe *means* of achieving a goal, rather than the objective itself. For example, a student who suggests "lower taxes" as a goal is looking for an increase in disposable income or in personal living standards. In rewording statements of means into statements of goals, first call on students to help.

2 Tell class that many groups in society are concerned about what economic goals the United States should strive to reach. Explain that you will now present a list of six broad national goals based on the thinking of experts, such as economists. List the following six goals and their meanings on the chalkboard or transparency:

—Economic growth: rising output of goods and services per capita, permitting an increasing standard of living

—Price stability: little or no change in the average level of prices of goods and services

—Full employment of human resources (labor): the condition that exists when all persons willing and able to work can obtain employment*

—Economic security: protection against economic adversities not of one's own making

*The definition is technically incomplete. In its broader meaning, full employment refers to the efficient use of all available resources, not just human resources. (Also see Item 4, Full Employment, under the heading Broad Social Goals, below.)

SOURCE: Adapted from Chapter I, *Instructor's Resource Guide to Economics: An Introduction to the World Around You*, by Dennis J. Weidenaar and Emanuel T. Weiler. © 1976 Addison-Wesley Publishing Company, Inc. Used with permission.

—Economic freedom: the right of producers and consumers to make market decisions on the basis of their own self-interest or preference

—Economic equity: fairness in the distribution of the risks and rewards of the economy

3 Have the class examine the economic objectives they proposed in Step 1 and then classify them according to the broad goals listed in Step 2. If necessary, add other broad goals—use the background reading on concepts as a guide—or ask students to suggest additional broad social goals if some of the economic objectives they suggested do not seem to fit any of the original six categories.

4 Ask students to rank the six broad goals and any others added in Step 3, according to personal preference. Use a show of hands to determine overall class preference.

5 Select two or three of the students' economic objectives from Step 1 that fit under the broad economic goal to which the class gave the highest rank in Step 4. Ask students to suggest what private or governmental actions might be necessary to achieve the specified objective. Then ask whether the suggested actions would be in conflict in their outcome with any of the other broad economic goals (example: equal employment opportunity laws, to achieve economic equity, vis-à-vis the economic freedom of employers to hire whom they wish). What would be the trade-offs?

CONCEPTS FOR EVALUATING ECONOMIC ACTIONS AND POLICIES

BROAD SOCIAL GOALS

The heart of economics is decision-making—choosing among alternatives. Economic decisions are not made in a vacuum. Rather, they are made in the light of a set of goals. These goals vary from one society to another, and they vary among groups and individuals within societies. The goals most evident in the modern world, and particularly in American society are: freedom, economic efficiency, equity, security, stability (full employment and the absence of inflation), and growth.

These goals or criteria provide means for evaluating the performance of economic systems and parts of them, as well as the desirability of existing programs and newly proposed policies.

1 Freedom

Economic freedoms are those of the marketplace—the freedom of consumers to decide how they wish to allocate their spending among various goods and services, the freedom of workers to choose to change their job, to join a union, and to go on strike, the freedom to establish a business and to decide what to produce and when to change the pattern of production, the freedom of savers and investors to decide how much to save and where to invest their savings.

Economists are concerned about the freedom of individuals and groups, especially insofar as particular actions open up or restrict freedom in the marketplace and affect the other goals of economic efficiency, equity, stability, growth, and security. Some argue that more governmental regulation limits the freedom of people to make individual choices. At the same time, however, such policies may free other people to take greater advantage of the opportunities provided in a market economy. In short, it is essential to define the kinds of freedom under discussion and determine whose behavior is most likely to be affected.

2 Economic Efficiency

There are several dimensions to efficiency. The first is technical efficiency, which concerns using the least amount of resource inputs to obtain a given output or obtaining the largest output with a given amount of resource input. This does not necessarily indicate the most appropriate choice, however, because it fails to consider the different costs of various inputs or the different benefits of various outputs. Economic efficiency goes beyond technical efficiency and considers the total costs and total benefits of various decisions. Economic efficiency means getting the most out of available resources. Actions should be undertaken if the benefits exceed the costs; they should not be undertaken if the costs exceed the benefits. The concept of economic efficiency is central in economics, and it should receive heavy emphasis in both individual and social decision-making.

3 Equity

Equity is an elusive concept. There is little agreement on what is equitable; people differ in their conception of what represents equity or fairness. In evaluating economic performance, the concept serves as a reminder to investigate who or what kinds of people are made better or worse off as a result, for example, of a change in prices or the implementation of a new government program. Though two actions might appear to be equally efficient from an economic standpoint, one might, for example, benefit the rich and another the poor, one might benefit consumers and another producers, and so on. Many people would not be indifferent to the results, since they harbor some concept of what is more or less equitable. Ultimately, the concept of equity manifests itself in the distribution of income and wealth. A more neutral way of dealing with this concept is simply to talk about the income distribution effects of economic actions: who gains and who loses?

4 Full Employment

(NOTE: The 3–5 percent range of unemployment cited below as consistent with full employment of labor was true at the time the statement was written. Because of changes that have taken place in the labor market since, most economists now believe that a higher percentage range of unemployment is consistent with full employment.)

Full employment means that all of an economy's resources are fully utilized. In practice, an unem-

SOURCE: *Master Curriculum Guide*, Part I, *A Framework for Teaching Economics, Basic Concepts* (New York: Joint Council on Economic Education, 1977), pp. 25–26.

ployment rate which reflects normal frictional unemployment has come to be viewed as the operational measure of full employment, with continuing debate as to what rate in the 3–5 percent range is indicative of full employment. The goal of full employment recognizes the heavy costs in lost output that accompany higher rates of unemployment, as well as the costs to individuals through economic hardship.

5 Price Stability

Price stability—the absence of inflation—is also a goal. While reasonable price stability might involve an upward creep of prices (perhaps 2 percent per year) substantial rates of increase often require individuals and businesses to make costly adjustments to offset the effects of rising prices.

6 Security

The goal of economic security concerns the desire of people for protection against economic risks, such as unemployment, destitution in old age, business failures, bank failures, and precipitous price declines for one's produce. The desire for security has led to a variety of public programs and policies including unemployment compensation, social security, federal bank deposit insurance, farm price supports, and FHA-guaranteed housing loans. Economic security also results from private efforts, such as saving and insurance purchases, as well as from the growth of the economy, which provides the mass of the people with more material wealth. Nations also engage in the quest for economic security by seeking through international agreements to assure themselves of access to key resources (e.g., the Soviet-American grain agreement) or of adequate prices for their exports (e.g., the international tin agreement).

7 Growth

"What effect will this policy or program have on economic growth?" is a frequently asked question. Though this criterion is most frequently discussed in thinking about a nation's economic growth, individuals and firms also take account of how their actions and those of others will affect their own future economic well-being, as reflected in higher incomes and increased profits. Growth is a long-run goal, to be thought of in years and decades. Whereas growth has typically been viewed as producing a broad range of benefits, attention has recently been called to the various costs that accompany economic growth. Consequently, growth is a less universally accepted goal today than it was a decade ago.

8 Other Goals

At times there are other goals important in the consideration of specific problems or questions. This listing simply reminds readers that they should consider other possible goals that fit the issue.

TRADE-OFFS AMONG GOALS

These criteria for judging the performance of the economy and the multitude of actions occurring in it are most useful when discussing policy decisions inasmuch as policy actions and proposals are presumably directed toward the achievement of some goal(s). However, many of the goals conflict and therefore difficult trade-offs have to be made. Examples are farm price supports, which promote security for farmers but may reduce efficiency and raise prices for consumers; minimum wage laws, which can be thought of as equitable (in trying to raise wages of lower-paid workers) but may increase unemployment; and wage-price controls, which may temporarily restrain inflation but at the same time reduce efficiency and freedom. Economic analysis does not make value judgments on policy questions such as these. It can help people to understand the nature of the trade-offs and thereby form their own judgments in the light of their own values. Economic analysis encourages a reasoned approach to controversial economic issues, and this is perhaps the single most important reason for citizens to increase their economic understanding.

SELF-INTEREST AND PERSONAL VALUES

The concept of self-interest differs from the goals listed above. Self-interest reflects the concern of individuals for their own well-being and personal values, whereas the other social goals noted reflect broader concerns. Often the achievement of social goals will come at the expense of particular individuals or groups of individuals. Those individuals or groups adversely affected are likely to oppose actions proposed to promote attainment of these broad social goals.

4.7 An Energy Survey

GRADE LEVEL Secondary

ECONOMIC CONCEPTS Cost-benefit analysis; opportunity cost; government regulation

INTRODUCTION Students rank a set of proposals for saving energy. They are then required to defend their decisions. Discussion concerns the economic and personal consequences of each proposal.

OBJECTIVES Students demonstrate their understanding of the implications of energy-saving proposals by:

1 Ranking the proposals according to effectiveness in saving energy;

2 Giving reasons for the rankings;

3 Analyzing the economic and personal consequences of each proposal.

MATERIALS Handout 4.7A; seven large sheets of oaktag or cardboard.

PROCEDURES

1 Number the sheets of oaktag from 1 to 7 and place them around the room. Space them far enough apart so that the students can form groups around each sheet.

2 Distributute the handout. Tell students that the purpose of the proposed actions listed on the handout is to produce a substantial cutback in energy use. Allow time for students to read the question and directions and rank the proposals.

3 Tell students that each one is to go to the oaktag sheet with the same number as the proposal to which the student gave top rank. Thus, they will form seven groups (or fewer, if some proposals fail to receive top rank from any students).

4 Ask the seven groups of students to prepare possible answers to the following questions:

a What might be some of the economic costs and benefits of the proposal?

b What groups of people might gain if the proposal were adopted? What groups might lose?

c Is the proposal practical?

d Are the economic costs-benefits of the proposal in conflict with those of other proposals on the list?

e Why did you give the proposal top rank?

f What would be your personal costs and benefits if the proposal were adopted?

5 Have someone from the largest group present its answers. Encourage the rest of the class to challenge the responses on such grounds as inconsistency, conflict of priorities, and incompleteness, and to raise questions of their own.

SOURCE: Adapted from a lesson by John S. Morton in *The Economics of the Energy Problem* (New York: Joint Council on Economic Education, 1975), pp. 13–14.

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Handout 4.7A

A CONSUMER SURVEY OF ENERGY-SAVING PREFERENCES

Question: Which of the following proposals do you think would save the most energy?

Directions: Rank the proposals from 1 (most effective) to 7 (least effective). Consider the difficulty or ease of carrying out the proposal as well as the amount of energy that might be saved.

	RANK
1 Require all schools to have a three-month winter break instead of a three-month summer break to save fuel.	_____
2 Let supply and demand (market conditions) set the price of all forms of energy.	_____
3 Increase the age at which a person can get a driver's license to 19.	_____
4 Lower clean air standards so that industries can burn high-sulfur coal instead of oil or natural gas.	_____
5 Ration gasoline so that every driver can obtain only a set amount.	_____
6 Ban the use of recreational vehicles such as campers, minibikes, snowmobiles, and pleasure motorboats.	_____
7 Double the price of electricity and natural gas to discourage residential use.	_____

From *Master Curriculum Guide for the Nation's Schools*, Part II, *Strategies for Teaching Economics: Using Economics in Social Studies Methods Courses*, 1982. Joint Council on Economic Education, 1212 Avenue of the Americas, New York, NY 10036.